# Record of Decision on the Regional Connector Transit Corridor Project in Los Angeles County, California by the Federal Transit Administration

#### Decision

The Federal Transit Administration (FTA) has determined that the requirements of the National Environmental Policy Act of 1969 (NEPA) and related Federal environmental statutes, regulations, and executive orders have been satisfied for the Regional Connector Transit Corridor Project (the Project) located in Los Angeles County.

This environmental Record of Decision (ROD) applies to the fixed guideway transit alternative connecting the Metro Blue Line terminus at the 7<sup>th</sup> Street/Metro Center Station to the Metro Gold Line, which was described as the Project (defined as the Locally Preferred Alternative (LPA) and refinements) and evaluated in the *Regional Connector Transit Corridor Project Final Environmental Impact Statement/Environmental Impact Report* (Final EIS), dated January 2012. The Project sponsor, the Los Angeles County Metropolitan Transportation Authority (LACMTA), seeks financial assistance from FTA for the Project. If FTA provides financial assistance for the final design or construction of the Project, FTA will require that the LACMTA design and build it as presented in the Final EIS and this ROD. Any proposed change by the LACMTA must be evaluated in accordance with 23 C.F.R. § 771.130 and must be approved by FTA in writing before the agency requesting the change can proceed with the change.

#### Background

The Project will provide a 1.9-mile direct connection from the Metro Blue Line terminus at the 7<sup>th</sup> Street/Metro Center Station to the Metro Gold Line tracks near 1<sup>st</sup> and Alameda Streets with three new below grade station locations. The alignment will extend north from the 7<sup>th</sup> Street/Metro Center Station under Flower Street to 2<sup>nd</sup> Street. The tracks will continue north underneath Flower Street and veer northeast near the intersection of 3<sup>rd</sup> and Flower Streets to run east underneath 2<sup>nd</sup> Street. The tracks will then proceed east underneath the 2<sup>nd</sup> Street Tunnel and 2<sup>nd</sup> Street itself, and lead to a junction under the intersection of 1<sup>st</sup> and Alameda Streets. To the north and east of the junction, trains will rise to the surface through two new portals to connect to the Metro Gold Line heading north to Union Station, Pasadena, Azusa and eventually Montclair and east towards East Los Angeles. The Project will include three new stations at 2<sup>nd</sup>/Hope Street, 2<sup>nd</sup>/Broadway, and 1<sup>st</sup>/Central Avenue.

As the Project sponsor and potential recipient of FTA financial assistance for the Project, LACMTA served as a co-lead agency with FTA in conducting the environmental review process.

#### Planning for the Project

The Project aims to improve travel times, reduce transfers, reduce traffic congestion, improve air quality, and create a sustainable light rail transit (LRT) system that serves people throughout the region as well as in downtown Los Angeles. The Project will improve transit service within the

Regional Connector Transit Corridor (Corridor) and increase regional connectivity throughout the Los Angeles County region by connecting the light rail service of the Metro Gold Line to the Metro Blue Line and the Metro Exposition Line. The vision is to connect the spokes of the regional transit system and provide a "one-seat ride" (a trip with no transfers) from Long Beach to Pasadena, Azusa, and eventually Montclair and from East Los Angeles to Santa Monica. This link will serve communities across the region and will allow greater accessibility to important business, cultural, and residential destinations in downtown Los Angeles while serving population and employment growth in Los Angeles County. The major themes and underlying needs supporting transit improvements in the Corridor include peak hour congestion within the Corridor, transit accessibility and availability, land use integration and economic development, growing demand for transit service, and benefits for the environment.

FTA published the Notice of Intent (NOI) to prepare an EIS for this Project in the *Federal Register* on March 24, 2009. The scoping process concluded on May 11, 2009. The *Regional Connector Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS)* was made available to identified stakeholders, agencies, and the general public for review and comment for a 45-day review period from September 3, 2010 through October 18, 2010. On October 28, 2010, the LACMTA Board of Directors voted to designate the Fully Underground LRT Alternative without the Flower/5<sup>th</sup>/4<sup>th</sup> Street Station as the Locally Preferred Alternative (LPA). However, the Project design will not preclude construction of a station at this location as a future, separate project.

Based on comments received on the Draft EIS and input received from community meetings, refinements were made to the alignment of the LPA to reduce or avoid previously identified construction, parking, and right-of-way impacts. A Supplemental Environmental Assessment/ Recirculated Draft Environmental Impact Report (SEA/RDEIR) evaluating the impacts of refinements to the LPA was circulated for public comment over a 45-day review period between July 22, 2011 and September 6, 2011.

The Notice of Availability (NOA) for the Final EIS was published in the *Federal Register* on January 20, 2012. The review period for the Final EIS concluded on February 21, 2012.

#### **Alternatives Considered**

FTA and LACMTA considered a broad range of alternatives in various studies prior to the initiation of the NEPA process and continuing through the Draft and Final EIS. The planning and project development process involved analyzing the alternatives to determine which ones would be studied in the Alternatives Analysis (AA), which was released in early 2009, and carried through into the Draft EIS. Alternatives can be eliminated from further consideration during the planning process, before the NEPA process is initiated, or after the NEPA process is initiated (e.g., during NEPA scoping or early coordination activities, as part of the planning process). The AA results in alternatives being selected for further study in the EIS.

Prior to the initiation of AA, several studies identified the need for a direct connection between Metro lines running on the east and those on the west of downtown. The *Blue Line Connection Preliminary Planning Study* (1993) examined alternatives for light rail line through downtown Los Angeles to connect the Long Beach and Pasadena segments of the Metro Blue Line. Also in 1993, the *Pasadena – Los Angeles Light Rail Transit Project Environmental Impact Report* identified that a direct light rail connection would be possible between Union Station and 7<sup>th</sup> Street/Metro Center Station to reduce the number of required transfers between the Metro Red,

Gold, and Blue Lines. The *Regional Light Rail Connector Study* (2004) included an engineering feasibility study to identify potential alignment, station, and configuration alternatives for a new LRT connection between the Metro Blue, Exposition, and Gold Lines.

Planning and screening efforts were conducted to lead up to the NEPA process and identify which alternatives met the Project's purpose and need. Identified alternatives were advanced and analyzed through the AA process, thereby resulting in two build alternatives to be carried through into the EIS process. The screening, evaluation, and public involvement effort included:

- 1. An initial screening of the potential reasonable transit modes, alignments, and station locations occurred before the public and agencies scoping meetings. This screening resulted in the conceptual alternatives presented for comment at the scoping meetings.
- 2. A detailed screening of the conceptual alternatives determined the alternatives that were discussed, analyzed, and evaluated in the AA and presented for public comment.
- 3. A final alternatives screening in the AA resulted in two build alternatives being carried forward into the EIS process. These two build alternatives, along with a third build alternative added in response to public input received during scoping and preparation of the Draft EIS, were analyzed in the Draft EIS and Final EIS and presented for public comment.

Heavy Rail Transit, Bus Rapid Transit, and LRT modes were considered during early scoping meetings. However, because this project has two distinctive end points (7<sup>th</sup> Street/Metro Center Station and the 1<sup>st</sup> and Alameda Station) and the existing Metro Blue and Gold Lines are LRT systems, LRT was identified as necessary and the most compatible to integrate into the two locations.

Previous studies completed during the early-mid 1990's identified alternative alignments including using Alameda Street or other north/south street connection through downtown to connect to the Metro Blue Line at Washington Boulevard near Long Beach Boulevard or continuing an underground alignment from the 7<sup>th</sup> Street/Metro Center Station through to Chinatown directly on to Pasadena, by-passing Union Station. The previously studied alignments were outside of the project study area, almost twice as long as the proposed Project, more costly and of greater environmental impact. Therefore, these alternatives were withdrawn from consideration.

An initial set of 36 alternatives were developed, spanning all of the appropriate alignments that would link the Metro Blue, Gold, and Exposition Lines. The initial alternatives represented alignments using mainly Flower, Figueroa, Temple, 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and Hewitt Streets to link the 7<sup>th</sup> Street/Metro Center Station and Little Tokyo/Arts District Station. The initial alternatives included aerial, at-grade, and underground configurations and station alternatives. The AA initial screening resulted in alignment configurations being eliminated from further analysis as referenced in the *Alternatives Identification Report* (April 2008). Comments received during the early scoping period did not reveal support for an aerial configuration. Also considering right-of-way requirements, cost, and traffic impacts, aerial configurations were withdrawn from consideration.

The initial alternatives screening resulted in eight alignment alternatives plus the No Build and Transportation System Management (TSM) alternatives to be analyzed in more detail in the

Final Alternatives Analysis Report (December 2008). After further input from stakeholders, agencies, and the public, the eight alternatives were compared using a multi-criteria comparison model. Key considerations and criteria used in the screening of alternatives and station locations included: ridership, travel time savings, community acceptability, number of connections to key activity centers, land use compatibility and urban design issues, financial feasibility, constructability, right-of-way constraints, operational feasibility, environmental impacts and benefits, and safety. The Final Alternatives Analysis Report recommended the At-Grade Emphasis LRT, Underground Emphasis LRT, and Fully Underground LRT alternatives along with the No Build and TSM alternatives to be put forth for further engineering, environmental analysis, and urban design assessments.

The alternatives studied in the Draft EIS and Final EIS were the No Build, Transportation System Management (TSM), At-Grade Emphasis LRT, Underground Emphasis LRT, and Fully Underground LRT alternatives:

No Build Alternative transit network within the project area would be largely the same as it is now and would not include any major service improvements or new transportation infrastructure beyond what is listed in LACMTA's 2009 Long Range Transportation Plan. It would not have led to a connection meeting the needs outlined in the Purpose and Need statement for the Proposed Action.

TSM Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines on Upper Grand and Lower Grand routes, linking the 7<sup>th</sup> Street/Metro Center and Union Stations. Intermediate stops would provide additional transit coverage of Bunker Hill, Little Tokyo, and the Civic Center. Enhanced bus stops would be located every two to three blocks.

At-Grade Emphasis LRT Alternative would provide a direct connection with a combination of underground and at-grade segments from the existing underground 7<sup>th</sup> Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets with three new station locations at (Flower/6<sup>th</sup>/5<sup>th</sup> Street, 2<sup>nd</sup>/Hope Street, and Main/1<sup>st</sup> Street). From the existing Metro Blue Line platform at the 7<sup>th</sup> Street/Metro Center Station, the tracks would extend north underneath Flower Street to a new underground station just south of 5th Street. The tracks would continue north, surface just south of 3<sup>rd</sup> Street, cross 3<sup>rd</sup> Street at-grade level, and veer northeast through a portal in the hillside to an underground station at 2<sup>nd</sup> and Hope Streets. At this location, a new pedestrian bridge would be constructed to connect the station to Upper Grand Avenue. The tracks would continue northeast, to the 2<sup>nd</sup> Street Tunnel, and then travel east in the 2<sup>nd</sup> Street Tunnel toward Hill Street.

Underground Emphasis LRT Alternative would provide a direct connection from 7<sup>th</sup> Street/Metro Center Station to the Metro Gold Line tracks at the Little Tokyo/Arts District Station with three new station locations (Flower/5<sup>th</sup>/4<sup>th</sup> Street, 2<sup>nd</sup>/Hope Street, and 2<sup>nd</sup> Street Station – Broadway Option or 2<sup>nd</sup> Street Station –Los Angeles Street Option). The alignment would extend underground from the 7<sup>th</sup> Street/Metro Center Station beneath Flower Street to 2<sup>nd</sup> Street. The tracks would then proceed east underneath the 2<sup>nd</sup> Street Tunnel and 2<sup>nd</sup> Street to a new portal on the parcel bounded by 1<sup>st</sup> Street, Alameda Street, 2<sup>nd</sup> Street, and Central Avenue. The Underground Emphasis LRT Alternative would be entirely located underground except for a single at-grade crossing at the intersection of 1<sup>st</sup> and Alameda Streets.

Fully Underground LRT Alternative has the same alignment as the Underground Emphasis LRT Alternative except the rail junction at 1<sup>st</sup> and Alameda Streets will be located underground instead of at street level with two portals connecting to existing Metro Gold Line. The Fully Underground LRT included four new station locations (Flower/5<sup>th</sup>/4<sup>th</sup> Street, 2<sup>nd</sup>/Hope Street, 2<sup>nd</sup>/Broadway and 1<sup>st</sup>/Central Avenue). The Fully Underground LRT Alternative without the Flower/5<sup>th</sup>/4<sup>th</sup> Street Station was selected as the LPA. However, the project design would not preclude construction of a station at this location as a future, separate project.

After the Draft EIS, the LPA was refined to minimize construction and right-of-way impacts, including, but not limited to, the addition of an enhanced pedestrian walkway on Flower Street, shift in the alignment under Little Tokyo with an associated shift in the location of the 1<sup>st</sup>/Central Avenue Station, change in the tunnel boring machine (TBM) insertion site to the Mangrove property, and extended use of the TBM to 4<sup>th</sup> Street instead of ending at the proposed 2<sup>nd</sup>/Hope Street station, as described in the project description below.

#### **Description of the Project**

The Project as described in the Final EIS is the subject of this ROD. Final design and construction of the Regional Connector Transit Corridor is scheduled to begin in 2014, with revenue operations commencing in 2019. The Project will operate using high-floor articulated vehicles, electrically powered by overhead wires, and operate along rail tracks located in an exclusive underground right-of-way. The LPA alignment will be double-tracked and will be comprised of below-grade sections and portals connecting to existing LRT systems.

Route. The Project will cover approximately 1.9 miles from the Metro Blue Line terminus at the 7<sup>th</sup> Street/Metro Center Station to the Metro Gold Line. The Project will extend north from the existing Metro Blue Line platform at 7<sup>th</sup> Street/Metro Center Station and will run underneath Flower Street. The tracks will veer northeast near the intersection of 3<sup>rd</sup> and Flower Streets to run east underneath 2<sup>nd</sup> Street. The tracks will continue east underneath 2<sup>nd</sup> Street to just west of Central Avenue where the alignment will then veer northeast and into a new underground rail junction at Alameda Street. Separating from the junction, one set of tracks will continue north underground beneath the Mangrove property (located on the northeast corner of 1<sup>st</sup> and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station. The tracks will then travel under Temple Street, East of the Temple Street and the Alameda Street intersection, before surfacing through a portal in the southwest corner of the Los Angeles Department of Water and Power (LADWP) maintenance yard and rise to connect to the existing Metro Gold Line LRT bridge over US Highway 101 (US 101). The other set of tracks leaving the underground junction at Alameda Street will rise to the east within 1st Street to accommodate a new portal and the existing Metro Gold Line tracks. The portal will be located within 1<sup>st</sup> Street between Alameda and Garey Streets, with the portal opening just west of Garey Street. The new Regional Connector tracks will join the existing 1st Street LRT tracks, just west of the 1st Street Bridge.

<u>Stations</u>. Three new, below-grade stations will be located at 2<sup>nd</sup>/Hope Street, 2<sup>nd</sup>/Broadway Street, and the Little Tokyo/Arts District (1<sup>st</sup>/Central Avenue).

Other features. The project includes an enhanced pedestrian walkway along the east side of Flower Street between 4<sup>th</sup> and 7<sup>th</sup> Streets. Enhancements would include landscaping, way finding signage, art features, and amenities aimed at improving pedestrian experience and safety.

#### **Basis for Decision**

FTA has determined that the Project meets the purpose and need of the proposed action as discussed below.

Regional Connectivity and Transit Accessibility: The Project will substantially improve regional access and mobility. Two transfers are currently needed for Metro Blue Line light rail from Long Beach or Exposition Line from Culver City for passengers traveling to the Metro Gold Line to Pasadena or East Los Angeles. The Project will reduce transfers, thus improving mobility and trip times and drawing more riders onto the Metro Rail system. The Project will carry a high volume of transit trips, nearly 90,000 per day according to ridership projections. Daily linked transit trips will increase by nearly 18,000 persons. The Project will also provide rail transit coverage of the downtown area, and includes three new stations serving the Civic Center, Bunker Hill, Historic Core, Little Tokyo, and Arts District.

Peak Hour Congestion. The area from which Regional Connector ridership is expected to be drawn includes several freeways and major intersections that have significant traffic congestion and long delays, including Interstate 5 (I-5), US 101, and State Route 110 (SR 110). The improved convenience of transit improvements in the Regional Connector Transit Corridor would encourage use of a public transit alternative that would reduce daily vehicle trips, vehicle miles traveled (VMT), and congestion on the region's roadways.

Benefits for the Environment: The Project will substantially reduce VMT and help the region meet its greenhouse gas (GHG) reduction targets. The Project will result in a reduction of daily VMT, reducing regional GHG emissions by nearly 60,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e).

Land Use Integration and Economic Development: The Project will increase accessibility to activity centers, thereby facilitating transit oriented development opportunities in or near station areas, particularly where there are local land use incentives and favorable market conditions. Although the construction of the Project does not directly cause development to occur, the Project would offer the opportunity for land use plans and polices to encourage new development and redevelopment near stations to take advantage of transportation infrastructure and the transit accessibility. In addition, landscape treatments along the enhanced pedestrian walkway on Flower Street and near stations would enhance the urban design of the communities within the transit corridor, making opportunities for development more attractive. The Project will create significant numbers of jobs for the region. The Project will create approximately 16,500 new jobs over the four year construction period.

#### Measures to Mitigate the Adverse Effects of the Project

Measures to mitigate the effects of the Project were considered during the Project's development in coordination with the interested agencies. All reasonable means to avoid and minimize the adverse effects of the Project have been adopted. These mitigation actions include, but are not limited to, all commitments for further consultation on specific issues. The mitigation commitments are described in the Mitigation Monitoring and Reporting Plan (MMRP) to ensure fulfillment of all environmental and related commitments in the Final EIS (see Attachment A). Any change in such mitigation from the description in the Final EIS will require a review in accordance with 23 C.F.R. § 771.130 and must be approved by FTA in writing.

#### **Public Involvement and Outreach**

Development of the Project has included public outreach using different venues and techniques for participation by the public and other agencies. Public meetings, including formal public and agency scoping meetings, public hearings, and a series of community update meetings were held at key study milestones. All meetings were located within various parts of the Corridor that were accessible by public transit.

Multi-lingual outreach to Japanese, Korean, and Spanish-speaking stakeholders was conducted, including translation at community updates and formal scoping meetings, as well as translation of most collateral materials. Multi-tiered meeting notifications including direct mail, internet based distribution via email, print and broadcast media, newspaper advertisements, and on-board postings on Metro buses and trains. Employment of "new" media such as blogs, social networks, and other internet or web-based tools (including a live web-broadcast of an April 2010 Community Update Meeting) were used to provide regional notification and involve traditionally hard to reach audiences (such as youth and commuters) in the decision-making process.

LACMTA maintained a contact list of stakeholders located throughout the project area and those located adjacent to the Corridor or who could be directly affected by implementation of the Project. Stakeholders were notified of public station planning workshops, focused on urban and streetscape design concepts and station area planning for the proposed stations along the project corridor. Workshop participants were involved in group discussions and were given the opportunity to provide feedback to the project team.

Targeted stakeholder meetings focused on specialized issues and localized concerns, including the stakeholders in Little Tokyo and the Little Tokyo Working Group (LTWG), which addressed concerns related to construction and operational impacts in Little Tokyo and Urban Design Working Group (UDWG), which examined urban design issues as well as focused station location and entrance discussions for the Financial District, Bunker Hill, Little Tokyo, and Historic Core. Meetings held with residential groups such as the Savoy and Higgins Building Homeowners Associations in addition to large property owners in the Financial District and on Grand Avenue addressed potential impacts to their properties.

Initial public comments were received during a 49-day public scoping period that were documented and reviewed in the preparation of the Draft EIS. LACMTA initiated a second round of public comments with the release of the Draft EIS. During the 45-day public review period for the Draft EIS, the document was placed in local public libraries and other repository sites, and made available on the LACMTA website (http://www.metro.net/projects/connector). Public hearing testimony and written comments on the Draft EIS were compiled during the public review period.

In the fall of 2010, the LACMTA Board of Directors considered public comments as part of its selection process for the LPA for the Regional Connector Transit Corridor. Refinements, including the approach in and out of the underground station at 1<sup>st</sup> Street and Central Avenue on the eastern end of the alignment, were made to the LPA in response to comments received on the Draft EIS, in an effort to minimize environmental effects, and to refine project design.

Pursuant to NEPA (23 C.F.R. § 771.130 (c)), a SEA/RDEIR was prepared and circulated for public comment. The 45-day public review period for the SEA/RDEIR occurred between July 22, 2011 and September 6, 2011. The SEA/RDEIR was placed in local public libraries and other

repository sites, and posted on the project website (http://www.metro.net/projects/connector). Responses to public comments received during the circulation periods for the Draft EIS and SEA/RDEIR were incorporated into the Final EIS. Attachment B to this ROD includes and responds to public and agency comments received on the Final EIS since its circulation.

In complying with Section 6002 of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), FTA and LACMTA identified other Federal and non-Federal agencies that may have had an interest in the Project. Participating agency letters of invitation were mailed to agencies in March 2009. Agencies also were sent letters and were given an opportunity to comment on the SEA/RDEIR, Draft and Final EIS.

#### **Determinations and Findings**

#### Section 106 of the National Historic Preservation Act

Historic properties listed in or eligible for listing in the National Register of Historic Places and known archaeological resources will not be affected by the Project. The Project has the potential to directly affect the Los Angeles Zanja System, should a branch of the Zanja be encountered or discovered during construction. The Memorandum of Agreement (MOA), included as Attachment D, delineates specific State Historic Preservation Officer (SHPO)-approved procedures that will be implemented in the case of any unanticipated archaeological discovery during construction. Mitigation measures for treatment of discovered but not formally evaluated archaeological resources and for undiscovered archaeological resources, as well as for paleontological monitoring are included in the Mitigation Monitoring and Reporting Program (MMRP) and will be implemented during the Project construction, as necessary. FTA determined that the Project will not have an adverse effect on cultural resources within the project area.

#### **Air Quality Conformity**

The Project satisfies the Environmental Protection Agency (EPA) air quality conformity requirements under 40 C.F.R. Part 93, as documented in the Final EIS in Section 4.5.3.1. The Project involves an electrically-powered mass transit line that will not increase diesel traffic on the local roadway system and the operation of the Project will not involve a bus or rail terminal that significantly increases diesel vehicles. The Project would decrease the overall number of automobiles and vehicles operating in the region. As a result, it would neither cause new PM<sub>10</sub> or PM<sub>2.5</sub> hot spots nor increase the frequency or severity of existing PM<sub>10</sub> or PM<sub>2.5</sub> violations. No localized adverse impacts from CO are expected under this Project. The Project is included in a conforming Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), and thus the project is included in emission budgets developed for the region. The Project would implement the particulate matter control measures contained in the RTP and RTIP and meet the requirements of 40 C.F.R. § 93.117.

#### Section 4(f) Findings

The Project will not result in a use of Section 4(f) protected parks, recreation areas, or refuges under Title 49 U.S.C. § 303. In regards to historic resources, the Project will have a *de minimis* impact on the St. Vibiana Cathedral Rectory. Pursuant to 23 C.F.R. § 774.3, FTA has determined that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the LACMTA, will have a *de minimis* impact, as defined in 23 C.F.R. § 774.17, on the property.

The Project has the potential to directly affect the Los Angeles Zanja System, should a branch of the Zanja be encountered or discovered during construction. The Memorandum of Agreement establishes mitigation measures that are appropriate to avoid use as defined by Section 4(f).

#### **Endangered Species Act**

There are currently no sensitive species or habitat located directly within the project area. Due to lack of suitable habitat, none of the sensitive species listed by the California Natural Diversity Database are anticipated to occur in the project area. Due to the lack of suitable habitat, no formal consultation with the United States Fish and Wildlife Service was required. Therefore, no adverse effects pursuant to the Endangered Species Act will occur.

#### Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act

No local surface water bodies are located in the immediate vicinity of the Corridor. The Project will comply with Title III and Title IV of the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) standards during and following construction. To comply with the NPDES General Construction Permit, a Notice of Initiation will be filed with the Los Angeles Regional Water Quality Control Board (RWQCB) prior to construction. The Project will include preparation of a Storm Water Pollution Prevention Plan (SWPPP) that includes the identification and implementation of applicable Best Management Practices (BMPs) to control erosion and to ensure that dirt, construction materials, pollutants, or other human-associated materials are not discharged from the project area into surface waters or into areas that will eventually drain to storm drains. The SWPPP also includes a monitoring program to ascertain the effectiveness of the prescribed BMPs.

The construction and permanent BMPs included as part of the Project shall be developed and implemented in compliance with the RWQCB, the LACMTA stormwater standards, and shall be developed in cooperation with the City and County of Los Angeles. Prior to approval of grading permits, an appropriate drainage control plan, such as a Standard Urban Stormwater Mitigation Plan in accordance with City of Los Angeles standards, that controls construction and operational on-site and off-site runoff and drainage in a manner acceptable to LACMTA and the RWQCB for the specific project site shall be implemented. Upon completion of construction, a Notice of Termination will be filed with the RWQCB. Therefore, no adverse effects are anticipated related to surface water bodies for the Project.

#### Executive Order 11988: Floodplain Management

The Project is not located within any 100-year or 500-year flood zones and, therefore, no modifications to any established floodplains will result from implementation of the Project. The alignment is located in an area already developed with impervious surfaces as well as well-developed drainage infrastructure and will not increase the risk of flooding. No adverse effects to Executive Order 11988 (Floodplain Management) will occur.

#### Executive Order 12898: Environmental Justice

The study area for the Project is entirely within downtown Los Angeles. Little Tokyo was identified as an environmental justice population in the project area. Little Tokyo is one of only three remaining Japantowns in the United States, and is a historic cultural center of national importance. Based on field studies and recent demographic data, low-income and minority populations elsewhere along the alignment were not observed to be meaningfully greater than the surrounding areas nor were they greater than 50 percent of the general population.

Outside of Little Tokyo, there are no environmental justice populations that will be disproportionately impacted by the Project's construction and operation. Refinements to the LPA since publication of the Draft EIS have reduced potentially disproportionate adverse impacts in Little Tokyo. Less cut and cover construction and fewer acquisitions will be needed, and TBM staging will be in a less impactful location on the edge of Little Tokyo. By reducing the need for road and sidewalk closures, property acquisitions, job displacement, and overall neighborhood disruption during construction, the refinements have helped reduce potential impacts in Little Tokyo. Specific measures to avoid, minimize, or mitigate these adverse effects are set forth in the Final EIS and Attachment A to this ROD. Accordingly, FTA has concluded, in accordance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, that the environmental justice community will not be subject to disproportionately high and adverse human health or environmental effects as a result of the Project.

#### Environmental Finding required by Federal Transit Law [49 U.S.C. § 5324(b)]

The environmental record for the Project consists of all technical analyses, the Draft EIS, SEA/RDEIR, Final EIS, and this ROD, which includes the MMRP (Attachment A). This environmental record for the Project includes: the environmental effects of the Project; the adverse environmental effects that cannot be avoided; alternatives to the Project; and irreversible and irretrievable effects on the environment. FTA has reviewed the public and agency comments on the Draft EIS, SEA/RDEIR, and Final EIS and the transcripts of the hearings submitted under 49 U.S.C. § 5323(b). Attachment B to this ROD includes and responds to public and agency comments received on the Final EIS since its circulation. Attachment C includes relevant correspondence. There were no comments relating to new environmental issues that had not been previously addressed and resolved in Volumes F-2, F-3, and F-4 of the Final EIS. FTA finds that an adequate opportunity to present views was given to all parties having a significant economic, social, or environmental interest in the Project. FTA finds that the preservation and enhancement of the environment and the interest of the community in which the Project is located were considered. FTA finds that, with the execution of the MMRP in Attachment A, all reasonable steps are being taken to minimize the adverse environmental effects of the Project, and where adverse environmental effects remain, no feasible and prudent alternative to such effects exists.

Leslie T. Rogers
Regional Administrator

Federal Transit Administration, Region IX

Date

1JUN 29 2012

Attachments:

Attachment A: Mitigation Monitoring and Reporting Program

Attachment B: Summary of Comments and Responses to Comments on the Final EIS

Attachment C: Relevant Correspondence

Attachment D: Section 106 Memorandum of Agreement

Table 8-1. Mitigation Monitoring and Reporting Program

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Transportation Im	pacts			
Traffic circulation disruption would occur during TR-1: Prior to the initiation of localized construction activities, a traffic management and construction mitigation plan shall be devised. The closure schedules in the	Check design contract documents for compliance	Metro	Final Design	
construction.	construction traffic plan shall be coordinated to minimize impacts to residences, businesses, special events, and traffic flow. During these times, traffic shall be re-routed to adjacent streets via clearly marked detours. The traffic management and construction mitigation plan shall identify, for instance, proposed closure schedules and detour routes; construction traffic routes, including haul truck route, and hours so as to avoid peak hours where feasible. It shall also account for the provisions below. Traffic flow shall be maintained, particularly during peak hours, to the degree feasible. Access to adjacent businesses shall be maintained via existing or temporary driveways at all times during business hours, and residences at all times. Metro shall provide signage to indicate new ways to access businesses and community facilities affected by construction. Metro shall post advance notice signs prior to construction in areas where business access could be affected. Metro shall also notify Los Angeles Department of Transportation (LADOT) in advance of street closures, detours, or temporary lane reductions. Metro shall also inform advisory committees of known road closures during regularly scheduled meetings.  See also CN-1 through CN-3 and CN-5.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
routes along final design phase of the project. The routes shall be located to minimize noise, vibration, and other possible	Verify that community input into hauling schedule has occurred	Metro	Final Design	
needed.	trips shall be primarily scheduled at times when they would be least disruptive to the community. Lighted or reflective	Verify that TCTMC input into haul routes has occurred.	Metro, City of Los Angeles TCTMC	Final Design
	project-related traffic, the roads shall be restored to their pre-construction condition as quickly as is practicable. Haul routes shall be discussed with and approved by the City of Los Angeles through the Transportation Construction Traffic	Check design contract documents for compliance.	Metro	Final Design
	Management Committee (TCTMC).	Monitor construction activities for compliance.	Metro	Construction
		Verify whether roadway deterioration due to project traffic has occurred, and ensure that it is repaired.	Metro	Construction
Street parking would need to be temporarily removed during	TR-3: To avoid impacts to neighborhood parking supplies, Metro shall require the contractor to designate areas for construction/contractor employee parking and shall not allow employees to park in other lots or unauthorized areas.	Check design contract documents for compliance.	Metro	Final Design
construction.	Metro shall identify and implement measures to reduce the need for parking by construction workers, including carpool incentives, transit passes, or designated on-site or off-site parking. Metro shall direct construction workers not to park	Monitor construction activities for compliance.	Metro	Construction

on the street.		
See also DR-4 and DR-5.		

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Re-routing of pedestrian and bicycle traffic	pedestrian and bicycle traffic When a crosswalk is closed due to construction activities, would be needed during canopies, and walkways shall be provided as needed. When a crosswalk is closed due to construction activities, pedestrians shall be directed to nearby alternate crosswalks. Access shall be Americans with Disabilities Act	Check design contract documents for compliance.	Metro	Final Design
during		Monitor construction activities for compliance.	Metro	Construction
	TR-5: Bicyclists shall be encouraged through signage to ride carefully in streets near construction activities, ride carefully on sidewalks (as City of Los Angeles municipal code	Check design contract documents for compliance.	Metro	Final Design
	permits), or choose nearby alternate routes around construction sites. Detours shall be provided as needed. Metro shall provide signage showing the alternate bicycle routes. Pedestrian and bicycle circulation, and travel lanes temporarily impacted during construction shall be restored to their permanent configurations at the conclusion of the construction period and prior to operations.	Monitor construction activities for compliance.	Metro	Construction
Permanent reductions in intersection	TR-6: At the intersection of 4 <sup>th</sup> and Flower Streets, Metro, in coordination with LADOT, shall permanently restripe the southbound Flower Street approach to provide one shared	Verify that LADOT coordination has occurred.	Metro	Final Design
performance on Flower Street from 4 <sup>th</sup> to 6 <sup>th</sup> Streets would occur.	left-turn/through lane and two through lanes. Metro, in coordination with LADOT, shall also optimize the signal splits.	Check design contract documents for compliance.	Metro	Final Design

has occurre	peen restored	Construction
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Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	coordination with LADOT, shall permanently restripe the southbound Flower Street approach to provide three through lanes and one exclusive right-turn lane. Metro, in coordination with LADOT, shall also optimize the signal	Verify that LADOT coordination has occurred.	Metro	Final Design
		Check design contract documents for compliance.	Metro	Final Design
		Verify that restriping has occurred after the street has been restored from cut and cover activities.	Metro	Construction
	TR-8: At the intersection of 6 <sup>th</sup> and Flower Streets, Metro, in coordination with LADOT, shall permanently restripe the eastbound 6 <sup>th</sup> Street approach to provide three through	Verify that LADOT coordination has occurred.	Metro	Final Design
	lanes and two exclusive right-turn lanes. Metro, in coordination with LADOT, shall also optimize the signal splits.	Check design contract documents for compliance.	Metro	Final Design
		Verify that the restriping has occurred after the street has been restored from cut and cover activities.	Metro	Construction
Shuttle bus drop- off areas for City National Plaza could be affected	TR-9: Metro shall ensure that shuttle bus drop-off areas at City National Plaza are provided throughout construction.	Check design contract documents for compliance.	Metro	Final Design
by construction activities.		Verify that the restriping has occurred after the street has been restored from cut and cover activities.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Connectivity with other transit lines and pedestrian systems would be needed.	TR-10: Metro shall design and implement linkages with the proposed streetcar project and Bringing Back Broadway project at the 2 <sup>nd</sup> /Broadway station. The project shall also provide a knockout panel to the west side of Flower Street at 3 <sup>rd</sup> Street to connect to the pedestrian system previously designed by the City of Los Angeles.	Check design contract documents for compliance.	Metro	Final Design
	TR-11: Metro shall construct an enhanced pedestrian walkway along the east side of Flower Street between 4 <sup>th</sup> and 7 <sup>th</sup> Streets to better connect the Financial District to the improved transit services available at the existing 7 <sup>th</sup> Street/Metro Center Station.	Check design contract documents for compliance.	Metro	Final Design
Access to some bus stops would be restricted during	TR-12: Metro shall maintain access to bus stops and provide adequate signage to guide bus users to accessible stops. Metro shall minimize temporary closures or relocations of bus stops and layover zones. Metro shall	Check design contract documents and construction specifications for compliance.	Metro	Final Design
construction.	provide notices of closures and relocations on its website, smart phone apps, and other modes typically used to communicate service announcements. When closures of other bus operators' stops are needed, Metro shall work closely with the affected operators to provide notices.	Monitor construction activities and bus stop operation for compliance.	Metro	Construction
Some bus stops would need to be temporarily relocated due to street closures during construction, and buses may need to be re-routed	TR-13: As needed, Metro shall temporarily relocate bus stops to nearby alternative locations based on the re-routing of bus service, and provide adequate signage and notices at strategic locations indicating the relocated bus stops. Metro shall provide notices of relocations on its website, smart phone apps, and other modes typically used to communicate service announcements. Metro shall coordinate with municipal transit providers to temporarily relocate non-Metro bus stops. When bus re-routing is	Check design contract documents for compliance.	Metro	Final Design
around construction areas.	necessary, buses shall be re-routed to adjacent streets in a manner that minimizes inconvenience to bus passengers and to affected neighborhoods.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Displacement and	Relocation Impacts			
Partial taking of parking and primary access to the Central Plant	project, Metro shall provide replacement parking elsewhere	Check design contract documents for compliance.	Metro	Final Design
(APN 5151-014- 032, 703 W. 3 <sup>rd</sup> Street).		Monitor construction activities and parking lot use to ensure that replacement parking is maintained.	Metro	Construction
	DR-2: In using parcel APN 5151014032 for construction staging, Metro shall maintain access to the Central Plant located on that parcel at all times during construction.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
Some privately- owned parcels needed for construction staging currently contain buildings, but would be owned by Metro and may be vacant after construction.	DR-3: Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure or necessary for access shall be included in the Metro Joint Development Program for possible development. Any development shall be environmentally and separately cleared from this project and shall undergo its own community input process. Until a development is approved, the remaining underutilized property may be used for public parking spaces or at the very least shall be graded and fenced to a higher standard that reflects the community's identity and character more than typical gravel and chain link. Per Metro's Joint Development Policy, the community shall be included in the development process.	Oversee Metro Joint Development Program and ensure compliance.	Metro	Post- Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Public parking spaces would be lost in Little Tokyo during	mitigation program to mitigate the loss of public parking	Check design contract documents for compliance.	Metro, LADOT	Final Design
construction.	parking, reducing the number of restricted parking areas, phasing construction activities in a way that minimizes parking disruption, and increasing the time limits for onstreet parking. Restriping would occur on portions of Temple Street, Alameda Street, 1st Street, 2nd Street, Central Avenue, San Pedro Street, Judge John Aiso Street, 3rd Street, and Traction Avenue. Such parking mitigation shall be implemented on a temporary, tiered basis pending findings of the annual parking analysis described in EJ-11.	Monitor construction activities for compliance.	Metro, LADOT	Construction
	DR-5: Metro shall not hinder access to other public parking lots during construction.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	See also EJ-2 through EJ-9, EJ-11, and EF-1.			
Access to the Little Tokyo Library and other community		Check design contract documents for compliance.	Metro	Final Design
destinations could be affected by construction.		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	Program that includes protocol for community notification of construction activities, including traffic control measures, schedule of activities, and duration of operations, with written communications to the community translated into appropriate languages.	Ensure that an adequate Construction Mitigation Program has been developed.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
Displacement and relocation of businesses would	DR-8: Metro shall provide relocation assistance and compensation as required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of	Verify qualifications of property appraiser.	Metro	Pre- Construction
be necessary.	· · · ·	Ensure provision of relocation assistance and payment of affected owners just compensation not less than the appraised market value for their property.	Metro	Pre- Construction
A portion of the LADWP site on parcels 5173-007- 901 and 5173- 006-900 would	DR-9: Metro shall consult Los Angeles Department of Water and Power (LADWP) during the design phase to accommodate its operational needs during construction and operation of the project.	Check design contract documents for compliance and documentation of consultation with LADWP.	Metro, LADWP	Final Design
need to be permanently acquired for right-of-way.		Monitor construction activities for compliance.	Metro, LADWP	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Community and Ne	ighborhood Impacts			
Disruption of traffic patterns during construction would affect access to	possible. Detours shall be compliant with the ADA.	Check design contract documents for compliance.	Metro	Final Design
residences and businesses, which could affect the economic vitality of some businesses.	mark detours in accordance with the Manual on Uniform Traffic Control Devices, and other applicable local and state requirements. Detours shall be designed to minimize cutthrough traffic in adjacent residential areas.	Monitor construction activities for compliance.	Metro	Construction
some businesses.	CN-2: Early notification of traffic disruption shall be given to emergency service providers. Work plans and traffic control measures shall be coordinated with emergency responders to prevent impacts to emergency response times.	Verify that plans were developed in conjunction with emergency responders.	Metro, emergency service providers	Final Design
		Monitor construction activities for compliance.	Metro, emergency service providers	Construction
	CN-3: Traffic management and construction mitigation plans shall be developed in coordination with the community to minimize disruption and limit construction activities during special events. Worksite Traffic Control Plans shall be developed in conjunction with LADOT and	Monitor Final Design process and check documents for compliance.	Metro, LADOT	Final Design
	surrounding communities to minimize impacts to traffic, businesses, residents, and other stakeholders. Crossing guards and other temporary traffic controls shall be provided in the vicinity of construction sites, haul routes, and other relevant sites as proposed in California DOT Traffic Manual, Section 10-07.3, Warrants for Adult Crossing Guards, and as appropriate to maintain traffic flow during construction.	Monitor construction activities for compliance.	Metro, LADOT	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	CN-4: A 24-hour live hotline for community concerns regarding construction shall be provided, as well as a project office within the Little Tokyo community. Residents and businesses shall also be provided with comment/complaint forms during construction. A construction office shall also be placed within the community to provide in-person assistance and services. Metro shall negotiate with the Japanese American National Museum (JANM) to locate the office within the museum's historic building on 1 <sup>st</sup> Street. The hotline and office shall enable Metro to maintain day-to-day contact with the community during construction and provide community members with all project details that may be relevant to the public.	Verify continuous operation of hotline and construction office.	Metro	Construction
	CN-5: A community outreach plan shall be developed and implemented to notify local communities and the general public of construction schedules and road and sidewalk	Verify preparation of community outreach plan.	Metro	Final Design
	detours. Metro shall coordinate with local communities during preparation of the traffic management plans to minimize potential construction impacts to community	Verify preparation of traffic management plans in conjunction with community stakeholders.	Metro	Final Design
		Check design contract documents for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	with community input to directly address specific construction impacts in the project area. Metro shall	Establish RCCLC.	Metro, Community stakeholders	Preliminary Engineering
	establish and receive input from the RCCLC in developing the construction mitigation plan. The RCCLC shall consist of representatives from all parts of the alignment area. Metro shall work with the RCCLC in developing the outreach plan.	Verify preparation of construction mitigation plan and outreach plan in conjunction with community stakeholders.	Metro	Final Design
		Check design contract documents for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	See also DR-4 and DR-5.			
Construction sites could have a negative impact on the community if left unsecured.	CN-7: Barriers shall be erected and security personnel provided during construction to minimize trespassing and vandalism. Barriers shall be enhanced with culturally-relevant artwork, attractive design features, and advertisements for parking locations and businesses.	Verify incorporation of community input into artwork and design feature plans.	Metro	Final Design
Signage sha construction	Signage shall also identify that businesses are open during construction. Community input shall be sought in determining artwork and design features.	Check design contract documents for compliance.	Final Design	
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
The 1 <sup>st</sup> /Central Avenue station should incorporate the Arts District's identity, in addition to Little Tokyo.	CN-8: Metro shall implement urban design improvements in the form of an "Arts District Path" linking the Arts District to the 1 <sup>st</sup> /Central Avenue station. Metro shall invite Southern California Institute of Architecture and other local students to participate in the path's design. The path shall include sidewalk enhancements, design elements, way finding signage, and crosswalk improvements. The design of the station shall enhance pedestrian circulation.	Verify incorporation of Arts District input into art path design.	Metro	Preliminary Engineering, Final Design
	CN-9: Design of the 1 <sup>st</sup> /Central Avenue station shall encourage connections and pedestrian travel to the Japanese Village Plaza (JVP), Los Angeles Hompa Hongwanji Temple, the JANM, and businesses south of 2 <sup>nd</sup> Street.	Check design contract documents for compliance.	Metro	Final Design
Temporary intermittent utility disruption could occur as part of construction.	CN-10: Metro shall field verify (by potholing or other methods) the exact locations and depths of underground utilities and conduct condition checks prior to utility relocation.	Check design contract documents for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	CN-11: Metro shall coordinate closely with utility providers to develop a service plan as needed to address planned and unplanned utility service interruptions. Should an	Verify that utility provider coordination has occurred.	Metro	Final Design
	unplanned outage occur as a result of construction activities, Metro shall contact the appropriate utility provider immediately to restore service. Metro shall also maintain access to utilities for providers' technicians. Metro shall	Check design contract documents for compliance.	Metro	Final Design
	provide protective measures such as pipe and conduit support systems, vibration and settlement monitoring, trench sheeting, and shoring during construction to avoid potential damage to utilities.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Visual and Aestheti	c Impacts			
Prominent street- level features would be installed, including station	VA-1: Metro shall coordinate with the station area communities to obtain input on the urban design of the project within the community.	Verify that community input has been incorporated into urban design.	Metro	Preliminary Engineering
entrances and tunnel portals. Visual character of the corridor could change slightly.		Check preliminary engineering and design contract documents for compliance.	Metro	Preliminary Engineering and Final Design
	VA-2: Urban design measures shall be developed to integrate the light rail transit (LRT) facilities (stations, portals, entrances, etc.) into each community as appropriate. Designs might address elements such as materials and colors. This process has already begun with community urban design workshops, and Metro shall continue to involve communities in this process. Metro shall coordinate with the City of Los Angeles Department of Planning staff during the design process and regarding urban design elements.	Check preliminary engineering and Final Design drawings for compliance.	Metro	Preliminary Engineering and Final Design
Temporary visual impacts could occur during construction, but would be less than	VA-3: Metro shall shield temporary lighting during construction to reduce spillover lighting.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
significant.		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	VA-4: Metro shall locate stockpile areas (storage areas for construction equipment, supplies, and excavated soil) primarily in less visually sensitive locations, where they are not visible from the road or to businesses or residents.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	VA-5: Temporary construction sheds and barricades shall be located so as to avoid obscuring significant views of historic properties.	Compare design contract documents and construction specifications to Final EIS/EIR to determine compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
Air Quality				
Construction emissions of VOC, NO <sub>X</sub> , CO, PM <sub>2.5</sub> , and dust would occur.	AQ-1: Contractors shall be required to adhere to South Coast Air Quality Management District (SCAQMD) standards for off-road engine emissions (refer to Section 4.5.1.1). Examples of how the contractors could ensure adherence include retrofitting off-road engines with add-on control devices such as catalytic oxidizers and diesel particulate filters where feasible.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-2: Metro shall require contractors to use equipment that meets up-to-date specifications (equivalent to models manufactured from 2013 to 2017) for pollutant emissions during project construction.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	standards for dust emissions such as SCAQMD Rule 403.  Examples of how the contractors could ensure adherence include applying water or a stabilizing agent to exposed	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	surfaces in sufficient quantity to prevent generation of dust plumes.	Monitor construction activities for compliance.	Metro Construction  Metro Final Design  Metro Construction  Metro Final Design	
	AQ-4: Dirt from construction equipment shall not extend 25 feet or more from an active operation, and shall be removed at the conclusion of each workday (refer to Section 4.5.3.3). Street sweeping services shall be coordinated with construction activity to minimize impacts	be documents and construction specifications for compliance.	Final Design	
	to surrounding businesses and residences.		Metro	Construction
	AQ-5: Contractors shall be required to utilize at least one of the measures set forth in SCAQMD Rule 403 Section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.	set forth in SCAQMD Rule 403 Section documents and construction specifications	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-6: All haul trucks hauling soil, sand, and other loose materials shall maintain at least six inches of freeboard (not filling trucks all the way to the top) in accordance with California Vehicle Code 23114.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	AQ-7: All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce dust emissions) (refer to Section 4.5.1.1).	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-8: Traffic speeds on unpaved roads shall be limited to 15 MPH.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-9: To control fugitive dust, especially during high wind situations, Metro shall require the contractor to implement the following provisions, consistent with the requirements of SCAQMD Rule 403, as they apply to each of the construction activities identified below:	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	When wind gusts exceed 25 MPH, in areas where earthmoving activities are occurring: (1A) Cease all active operations; or (2A) Apply water to soil not more than 15 minutes prior to moving such soil.			

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	AQ-9 (continued): Disturbed surface areas:  (OB) On the last day of active operations prior to a weekend or holiday: apply water with a mixture of chemical stabilizer diluted with not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; or  (1B) Apply chemical stabilizers prior to wind event; or  (2B) Apply water to all unstabilized disturbed areas three times per day. If there is evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; or  (3B) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; or  (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.  Unpaved roads:  (1C) Apply chemical stabilizers prior to wind event expected to exceed 25 MPH; or  (2C) Apply water twice per hour during active operation; or  (3C) Stop all vehicular traffic.  Open storage piles:  (1D) Apply water twice per hour; or  (2D) Install temporary coverings.  Paved road track-out:  (1E) Cover all haul vehicles; or  (2E) Comply with vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	AQ-9 (continued): All categories: (1F) Any other control measures approved by the Executive Officer and the United States Environmental Protection Agency as equivalent to the methods specified may be used.			
	AQ-10: Heavy equipment operations shall be suspended during second stage smog alerts as issued by SCAQMD.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-11: On-site stockpiles of debris, dirt, or rusty materials shall be covered or watered at least two times per day.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-12: Contractors shall utilize electricity supplied by LADWP rather than temporary diesel or gasoline generators, as feasible.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	AQ-13: Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site. Metro shall employ California Air Resources Board anti-idling requirements during construction. Metro shall require the contractor to regularly perform unscheduled inspections of	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	contractor to regularly perform unscheduled inspections of construction equipment and activities to ensure minimization of associated air quality impacts.	Monitor construction activities for compliance.	Metro	Construction
	AQ-14: Construction worker parking shall be configured to minimize traffic interference. This measure would minimize vehicle idling time, which would reduce emissions generated from construction vehicles.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	reduce emissions generated from construction vehicles.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-16: Metro shall require ongoing maintenance and adherence to manufacturer's specifications for all construction equipment engines and vehicles.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	and equipment to and from construction sites shall be provided where appropriate. This measure would minimize vehicle idling time, which would reduce emissions generated from construction vehicles.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-18: Metro shall require on-site construction equipment to meet EPA Tier 2 or higher emission standards according to the January 1, 2012 to December 31, 2014 and post-January 15, 2015 criteria.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-19: Metro shall maintain and clean all trucks and construction equipment as needed.	Monitor construction activities for compliance.	Metro	Construction
	AQ-20: Metro shall use low-sulfur fuel where possible.	Check design contract documents and construction specifications for compliance.	Metro Fina	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	AQ-21: The project and stations shall be designed and constructed in a manner consistent with Metro's sustainability policies (such as Metro's Energy and Sustainability Policy and Metro's Sustainability Implementation Plan).	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	implementation i fair).	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Construction- related lane closures and intersection improvements would result in increased emissions,	AQ-22: Detour routes shall be designed to ensure that traffic does not idle for extended periods of time, thus reducing the potential for localized exceedence of federal CO/CO <sub>2</sub> standards.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
particularly CO emissions, at the major points of delay.		Monitor construction activities for compliance.	Metro	Construction
Noise and Vibration				
Sensitive or historic buildings within 21 feet of construction may be susceptible to vibration damage.	NV-1: Mitigation Measure CR/B-2 shall also apply to sensitive, non-historic structures (Category I, II, III, IV buildings as defined in Table 4.7-4) located within 21 feet of vibration producing construction activity. However, design contract documents shall not require input or review by an architectural historian or historical architect under this mitigation measure.	Verify that an adequate survey of sensitive properties has been performed.	Metro	Preliminary Engineering
	See CR/B-2 and CR/B-4.			

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	during final design to ensure appropriate measures are taken to avoid any damage to sensitive buildings (Category I, II, III, IV buildings as defined by FTA in Table 4.7-4) or	Verify that pre- construction surveys have been performed where needed.	Metro	Final Design
	historic buildings due to construction-induced vibration. This shall include pre-construction surveys of all buildings within 21 feet of vibration producing construction activity to confirm the building category (Category I, II, III, IV buildings as defined in Table 4.7-4), structural condition of the building, and to provide a baseline for monitoring of	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	ground-borne vibration (GBV) and measuring the potential for GBV to cause damage where needed. Any damage caused by Metro's construction activities shall be repaired.	Monitor construction activities for compliance.	Metro	Construction
Moderate (but not significant) GBV could cause annoyance to	NV-3: Distances greater than those provided in EIS/EIR Table 4.7-5 shall be maintained near vibration-sensitive locations to avoid potential construction-related vibration impacts.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
sensitive land uses during construction.		Monitor construction activities for compliance.	Metro	Construction
	NV-4: Less vibration-intensive construction equipment or techniques shall be used near vibration-sensitive locations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-5: Heavily laden vehicles shall be routed away from vibration-sensitive locations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
		Monitor construction activities for compliance.	Metro	Construction
	NV-6: Earthmoving equipment shall be operated as far as possible from vibration-sensitive locations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-7: Construction activities that produce vibration, such as demolition, excavation, earthmoving, and ground impacting shall be sequenced so that the vibration sources do not operate simultaneously.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-8: Nighttime construction activities that produce noticeable vibration shall be avoided near vibration-sensitive locations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-9: Devices with the least impact shall be used to accomplish necessary tasks.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	NV-10: Non-impact demolition and construction methods, such as saw or torch cutting and removal for off-site demolition, chemical splitting, and hydraulic jack splitting, shall be used instead of high impact methods near vibration-sensitive locations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-11: Building protection measures such as underpinning, soil grouting, or other forms of ground improvement shall be used where needed to prevent deterioration of building condition due to construction.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-12: Pavement breakers, vibratory rollers, and packers shall operate as far as possible from vibration-sensitive locations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
Noise may inadvertently exceed FTA significance criteria during construction.	NV-13: The construction mitigation plan shall prohibit noise levels generated during construction from exceeding the FTA construction noise criteria. This could include prohibiting simultaneous operation of major pieces of construction equipment if simultaneous operation exceeds FTA construction noise criteria. If a noise complaint is filed during project construction, noise monitoring shall be conducted in the vicinity of the area in question. Although it is not expected to do so with the application of appropriate BMPs, if monitored noise levels exceed FTA construction noise	Monitor construction activities for compliance.	Metro	Construction

criteria, the contractor shall use all or a combination of the following measures( NV-14 through NV-17) to reduce construction noise levels below FTA construction noise criteria.		
		1

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	NV-14: Temporary noise barriers around the construction sites and localized barriers around specific items of equipment or smaller areas shall be provided as needed.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-15: Alternative back-up alarms/warning procedures shall be used where feasible as needed.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-16: Higher performance mufflers shall be used on equipment used during nighttime hours as needed near sensitive land uses.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	NV-17: Portable noise sheds for smaller, noisy equipment, such as air compressors, dewatering pumps, and generators shall be provided as needed.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

	Monitor construction activities for compliance.	Metro	Construction	

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Significant ground- borne noise (GBN)		Confirm provisions of the MOA.	Metro	Preliminary Engineering
occur during construction at Walt Disney Concert Hall, and the Broad Art Foundation Museum, which is currently under construction.  Mitigation for the Walt Disney Concert Hall has been modified to cover the Colburn School as well, in an abundance of caution  the State Historic Preservation Off includes stipulations that outline the for consultation and decision-mak federal agency and consulting par Historic American Building Survey Engineering Record (HABS/HAEF outline specific requirements for p surveys, geotechnical investigatio measures, and tunnel boring mack (for the Walt Disney Concert Hall of Tunnel Boring Machine:  NV-19: Maintenance and Operation operations (if applicable, the actio	the State Historic Preservation Officer (SHPO), which includes stipulations that outline the specific requirements for consultation and decision-making between the lead federal agency and consulting parties, specify the level of Historic American Building Survey/Historic American	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	Engineering Record (HABS/HAER) recordation, and outline specific requirements for pre- and post-construction surveys, geotechnical investigations, building protection measures, and tunnel boring machine (TBM) specifications (for the Walt Disney Concert Hall only).	Monitor construction activities for compliance.	Metro	Construction
	Tunnel Boring Machine:			
	NV-19: Maintenance and Operation: The construction contractor shall minimize vibration from jacking or pressing operations (if applicable, the action could be smoothed out to avoid a sharp push), and maintain machinery in good working order.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	NV-20: Coordination and Notification: There would be times when the Main Auditorium of the Walt Disney Concert Hall is vacant or not used for a noise-sensitive activity, thereby eliminating any noise impact from TBM. Similarly, there would be times at the Los Angeles Philharmonic Association Conference Room (and offices) of the Walt Disney Concert Hall and at the recording/performance halls of the Colburn School when activities are not particularly noise-sensitive. Metro shall coordinate closely with the Walt Disney Concert Hall, the Colburn School, and the Broad Art Foundation Museum, which is currently under construction, to ensure that the noise-generating parts of TBM operations shall be conducted to avoid noise-sensitive periods.	Monitor construction activities for compliance.	Metro	Construction
	Delivery Train:			
	NV-21: Speed: Delivery train speed shall be limited to 5 MPH in the vicinity of the Walt Disney Concert Hall, the Colburn School, and the Broad Art Foundation Museum, currently under construction, which would reduce the GBN to the lower range, or 5 dBA from the maximum range.	Monitor construction activities for compliance.	Metro	Construction
	NV-22: Resilient Mat: A resilient system to support and fasten the delivery train tracks shall be used during construction, which would reduce GBN levels by at least 4 dBA.	Check design contract documents and construction specifications for compliance.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	NV-22 (continued): Such as system shall include a) resilient mat under the tracks and b) a resilient grommet or bushing under the heads of any track fasteners (assuming some kind of anchor or bolt system). The hardness of the resilient mat shall be in the 40 to 50 durometer range, and be about one to two inches thick, depending on how heavily loaded the cars would be. The contractor shall select the mat thickness so that the rail does not bottom out during a car pass-by.	Monitor construction activities for compliance.	Metro	Construction
	NV-23: Conveyor: The delivery train shall be replaced with a conveyor system to transport materials in the tunnel if GBN exceeds the FTA annoyance criteria at the Walt Disney Concert Hall, the Colburn School, or the Broad Art	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	Foundation Museum, which is currently under construction.	Monitor construction activities for compliance.		Construction
	NV-24: Coordination and Notification: There would be times when the Main Auditorium and Choral Hall of the Walt Disney Concert Hall and the recording/performance halls of the Colburn School are vacant or not used for noise-sensitive activities, thereby eliminating any noise impact from the delivery train. Metro shall coordinate closely with the Walt Disney Concert Hall, the Colburn School, and the Broad Art Foundation Museum, which is currently under construction, to ensure that the delivery train pass-bys would be conducted to avoid noise-sensitive periods.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Significant GBN impacts and GBV could occur during construction at the	NV-25: Metro shall provide advance notice and coordinate with the affected property owners regarding schedules for tunneling and other activities prior to the commencement of those activities.	Monitor construction activities for compliance.	Metro	Construction
Hikari Lofts, offices in JVP, and the Nakamura Tetsujiro	NV-26: Metro shall provide advanced notification and coordination by doing the following.	Monitor construction activities for compliance.	Metro	Construction
Building.	Metro shall establish a Construction Community Relation Program to inform and coordinate construction activities including notification to all occupants at the Hikari Lofts, the interior designer office at the JVP, and the Nakamura Tetsujiro Building about the schedule of tunneling activities at least one month prior to the start of the activities.			
	<ul> <li>Metro shall monitor GBN and GBV levels in the in the building adjacent to TBM activity during its operation in that area.</li> </ul>			
	During the few days the TBM will be operating in this area, should GBN or GBV measurements exceed FTA annoyance criteria for short-term impacts during construction, Metro shall offer to temporarily relocate affected residents.			

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Significant GBN impacts could occur during	the Colburn School, Metro shall implement resiliently supported fasteners, isolated slab track, or other appropriate measures as needed to eliminate impacts and to reduce GBN below FTA annoyance criteria.	Verify that preliminary engineering studies have been completed.	Metro	Preliminary Engineering
operations at Walt Disney Concert Hall, Hikari Lofts, offices in JVP, the Nakamura Tetsujiro Building, and the		Check design contract documents and construction specifications for compliance.	Metro	Final Design
Broad Art Foundation Museum, currently under construction.	NV-28: In the vicinity of the Hikari Lofts and Nakamura Tetsujiro Building, Metro shall conduct engineering studies during final design to verify initial estimates of GBN and shall implement high compliance resilient fasteners,	Verify that Final Design studies have been completed.	Metro	Preliminary Engineering
Mitigation for the Walt Disney Concert Hall has been modified to cover the Colburn School as well, in an abundance of caution	FTA annoyance criteria.	Check design contract documents and construction specifications for compliance.		Final Design
	Art Foundation Museum, currently under construction, Metro shall conduct engineering studies during final design to verify initial estimates of GBN and shall implement high compliance resilient fasteners or other appropriate measures as needed to eliminate impacts and reduce GBN below FTA annoyance criteria.	Verify that Final Design studies have been completed.	Metro	Preliminary Engineering
		Check design contract documents and construction specifications for compliance.		Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Ecosystems/Biolog	jical Resources			
Some trees in the project area would be removed or disturbed during	EB-1: The construction contractor shall minimize disturbance to trees through avoidance or fencing.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
construction.		Monitor construction activities for compliance.	Metro	Construction
	EB-2: If disturbance is unavoidable, the construction contractor shall trim individual trees instead of removing them completely where feasible to reduce the scale of disturbance.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	EB-3: The construction contractor shall replant or replace disturbed or removed trees as soon as practicable.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
Some tree removal and trimming may need to occur during the bird breeding season,	EB-4: The construction contractor shall schedule necessary tree removal and trimming activities that would affect bird nesting outside of the bird breeding season, which can extend from February 1 to August 31.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
from February 1 to August 31.		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	EB-5: If it is not feasible to avoid tree removal and trimming related to construction during the breeding bird season from	Verify qualifications of biologist.	Metro	Pre-Construction
	conducted as recommended by the California Department of Fish and Game. A qualified biologist shall conduct two biological surveys, one 15 days prior and a second 72 hours prior to construction activities that would remove or disturb suitable nesting habitat. The biologist would prepare survey reports documenting the presence or absence of active nests of any protected native bird (as identified in the Migratory Bird Treaty Act) in the habitat to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors).  EB-6: If an active native bird species nest is located, construction within 300 feet of the nest (500 feet for raptor nests) shall be postponed or modified in consultation with the qualified biologist until the nest is vacated, juveniles	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
		Check design contract documents and construction specifications for compliance.	Metro	Final Design
	have fledged, and there is no evidence of a second attempt at nesting.	Monitor construction activities for compliance.	Metro	Construction
		Verify concurrence of qualified biologist.	Metro	Construction
Some of the trees that need to be	EB-7: After detailed engineering and design plans are prepared, a tree survey shall be conducted by a qualified	Verify that permit has been obtained.	Metro	Final Design
removed may be native trees.	removal of any of the native trees located along the proposed alignment and stations for the approved project,	Check design contract documents and construction specifications for compliance.	Metro	Final Design
removal permit shall be obtained from the Los Andeles	Monitor construction activities for compliance.	Metro	Construction	

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Geotechnical/Subs	urface/Seismic/Hazardous Materials			
ground movement before any construction, a survey of structures within the	Verify that design criteria have been established.	Metro	Final Design	
and cover construction and potential ground loss due to tunneling.	conducted in order to establish baseline conditions. A geotechnical instrumentation and settlement monitoring plan and mitigation measures shall be developed and adhered to during construction to ensure appropriate measures are taken to address any construction-induced movement. If assessments indicate the necessity to proactively protect nearby structures, additional support for	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that additional geotechnical studies have been completed.	Metro	Final Design
	underground construction. Metro shall require the construction contractor to limit movement to less than acceptable threshold values for vertical, horizontal, and angular deformation as a performance standard. These acceptable threshold values shall be established such that the risk of damage to buildings and utilities will be negligible to very slight. For buildings, these threshold values will be based on the relationship of building damage to angular distortion and horizontal strain consistent with Boscardin and Cording (1989) and qualitative factors including but not limited to the type of structure and its existing condition. For utility mains, these threshold values shall be those established by the utility owners. Additional data and survey information shall be gathered during final design for each building and utility main to enable assessment of the tolerance of potentially affected structures and utilities. Additional engineering and design level geotechnical studies shall be performed to define the nature of the soils and to refine the means of achieving each performance specification.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	GT-2: Ground improvement such as grouting or other methods shall be required to fill voids where appropriate and offset potential settlement when excess material has been removed during excavation. The criteria for implementing grouting or ground improvement measures	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	07.4	Monitor construction activities for compliance.	Metro	Construction
	GT-3: The tunnel alignment shall be grouted in advance to provide adequate soil support and minimize settlement as geotechnical conditions require.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	GT-4: Settlement along the project alignment shall be monitored using a series of measuring devices above the route of the alignment. Leveling surveys shall be conducted prior to tunneling to monitor for possible ground movements.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that adequate leveling surveys have been completed.	Metro	Pre-Construction
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	described and defined in design contract documents. Additional geotechnical provisions shall be included to the extent feasible, including use of an Earth Pressure Balance or Slurry TBM for tunnel construction to minimize ground loss. During tunnel construction, the soils encountered shall be monitored relative to anticipated soil conditions as described in a Geotechnical Baseline Report.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that an adequate Geotechnical Baseline Report has been prepared.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	See also CR/B-2.			
Contaminated soil or groundwater may be encountered during construction.	or groundwater engineering plans are being prepared a Contaminated Soil/Groundwater Management Plan shall be implemented during construction to establish procedures to follow if contamination is encountered in order to minimize	Verify that an adequate Contaminated Soil/Groundwater Management Plan has been prepared.	Metro	Final Design
construction.  associated risks to assure that applicable statutory and regulatory standards and requirements are satisfied. The plan shall be prepared during the final design phase of the project, and the construction contractor shall be held to the level of performance specified in the plan. The plan shall include procedures for the implementation of mitigation	Check design contract documents and construction specifications for compliance.	Metro	Final Design	
	measures GT-7 through GT-11.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	GT-7: Appropriate regulatory agencies, identified in the Contaminated Soil/Groundwater Management Plan, shall be contacted if contaminated soil or groundwater is encountered.	Check construction specifications for compliance.	Metro	Final Design
	encountered.	Monitor construction activities for compliance.	Metro	Construction
	GT-8: Sampling and analysis of soil and/or groundwater known or suspected to be impacted by hazardous materials shall be conducted in accordance with the procedures detailed in the Contaminated Soil/Groundwater Management Plan.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	storage, treatment, transport, and disposal of contaminated soil and/or groundwater shall be delineated and conducted in consultation with regulatory agencies and in accordance with established statutory and regulatory requirements as explained with specificity in the Contaminated Soil/Groundwater Management Plan.	Verify that consultation with appropriate regulatory agencies has occurred.	Metro, regulatory agencies	Final Design
		Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	GT-10: Dust control measures such as soil wetting, wind screens, etc. shall be implemented for contaminated soil.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	GT-11: Groundwater collection, treatment, and discharge shall be performed according to applicable standards and procedures (refer to Section 4.10.1).	Check design contract documents and construction specifications for compliance and consistency with Contaminated Soil/Groundwater Management Plan.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	GT-12: Worker Health and Safety Plan shall be implemented prior to the start of construction activities. All workers shall be required to review the plan, receive training if necessary, and sign the plan prior to starting work. The plan shall identify properties of concern, the nature and extent of contaminants that could be encountered during excavation activities, appropriate health and environmental protection procedures and equipment, emergency response procedures including the most direct route to a hospital, contact information for the Site Safety	Verify that an adequate Contaminated Soil/Groundwater Management Plan has been prepared.	Metro	Final Design
		Verify that training has occurred and workers have signed the plan.	Metro	Pre-Construction
	Officer.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	GT-13: Impermeable grout and other appropriate measures shall be used where necessary to fill gaps between the tunnels and the surrounding earth to address the potential for creation of a preferential pathway and resulting spread of existing contaminated groundwater.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	of existing contaminated groundwater.	Monitor construction activities for compliance.	Metro	Construction
Subsurface gases associated with oilfields in the vicinity of the	GT-14: Testing for subsurface gases particularly methane shall be conducted before and during construction along all portions of the underground alignment.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
project area may be encountered during construction.		Verify that adequate testing has occurred.	Metro	Final Design
GT-15: Construction of the project shall be consistent with the City of Los Angeles Methane Mitigation Standards, established in accordance with City of Los Angeles Ordinance No. 175790 and No. 180619, which provide detailed installation procedures, design parameters, and	Check design contract documents and construction specifications for compliance.	Metro	Final Design	
	test protocols for the methane gas mitigation system as well as methods to control methane intrusion emanating from geologic formations.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	implemented to protect workers and the public from exposure to toxic gases and prevent explosions. For instance, pressurized closed-face TBMs and other	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	equipment outfitted with ventilation systems would be used, as needed, to excavate the tunnels associated with the project, including Slurry Face Machines (SFMs) and Earth Pressure Balance Machines (EPBMs). During tunneling, the volume of gas (or water containing dissolved gas) released from the soil is confined to the excavated material chamber of the TBM because of the closed-face and gastight lining that is installed immediately behind the TBM. The project shall also be consistent with the City's Methane Mitigation Standards, which include provisions to protect workers and the public.	Monitor construction activities for compliance.	Metro	Construction
Asbestos and lead may be encountered during building demolition.	containing materials and lead-based paint shall be conducted. If necessary, destructive sampling shall be	Check design contract documents and construction specifications for compliance.	Metro	Final Design
demontor.		Verify that adequate surveys have been completed.	Metro	Final Design
		Monitor construction activities for compliance and verify that any necessary abatement has been completed before demolition begins.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
accidental release of construction-related hazardous materials in compliance with existing regulations. These shall include requirements for proper for construction-	Check design contract documents and construction specifications for compliance.	Metro	Final Design	
materials.	use, storage, and disposal of chemical products and hazardous materials used in construction; spill control and countermeasures, including employee spill prevention/response training; vehicle fueling procedures to avoid overtopping construction equipment fuel tanks; procedures for routine maintenance of construction equipment, including the proper containment and removal of grease and oils; procedures for the proper disposal of discarded containers of fuels and other chemicals.	Monitor construction activities for compliance.	Metro	Construction
Potential exists for intrusion of subsurface gases into the underground	shall be consistent with municipal code requirements for gas concentration/pressure testing on a specified frequency and, based on the results, appropriate mitigation measures	Check design contract documents and construction specifications for compliance.	Metro	Final Design
portions of the alignment.	or controls to be included in the design. These measures may include the use of gas-impermeable liners and venting to reduce or eliminate gas intrusion into stations and along the length of the underground segments.	Monitor construction activities for compliance.	Metro	Construction
		Verify that gas concentration and pressure testing is performed according to specified frequency.	Metro	Operation
Potential exists for hazardous materials to be encountered during excavation and construction activities.	GT-20: Prior to the onset of demolition and construction, Metro shall develop and implement an Environmental Site Assessment program in accordance with appropriate laws and regulations (refer to Section 4.9.1) to assess the potential for hazardous materials that may be encountered during construction.	Check design contract documents and construction specifications for compliance.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
		Monitor construction activities for compliance.	Metro	Construction
Potential exists for hazardous building materials to be encountered during demolitions.	GT-21: Prior to the onset of demolition and construction, Metro shall develop and implement plans for pre-demolition and demolition abatement of hazardous building materials (i.e., asbestos, lead-based paint, PCB-light ballasts) in accordance with appropriate laws and regulations such as	Check design contract documents and construction specifications for compliance.	Metro	Final Design
during demonitoris.	the Toxic Substances Control Act (refer to Section 4.9.1).	Monitor construction activities for compliance.	Metro	Construction
Water Resources				
Potential exists for excess erosion to occur during construction.	crosion to construction and shall specify procedures for implementing mitigation measures WR-2 through WR-5.	Verify that an adequate erosion control plan has been prepared.	Metro	Final Design
Construction.		Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	WR-2: Natural drainage, detention ponds, sediment ponds, or infiltration pits shall be used to allow runoff to collect and reduce or prevent erosion.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	runoff and to filter out large-sized sediments.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	WR-4: Down-drains or chutes shall be used to carry runoff from the top of a slope to the bottom.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	WR-5: Use of water for irrigation and dust control shall be controlled so as to avoid off-site runoff.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
Impacts to water quality stemming from both construction and operation of the	uality stemming maintained biological oil and grease removal systems in new storm drain systems to treat water before it leaves project sites.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
project could occur.		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	WR-7: Hazardous materials shall be stored properly and in accordance with applicable law to prevent contact with precipitation and runoff.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
		Monitor operations and maintenance for compliance.	Metro	Operation
	WR-8: Prior to the onset of demolition or construction an effective monitoring and cleanup program for spills and leaks of hazardous materials shall be developed and maintained.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
		Monitor operations and maintenance for compliance.	Metro	Operation
	WR-9: Equipment to be repaired or maintained shall be placed in covered areas on a pad of absorbent material to contain leaks, spills, or small discharges.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	WR-10: Periodic and consistent removal of landscape and construction debris shall be performed.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
		Monitor operations and maintenance for compliance.	Metro	Operation
	WR-11: Any significant chemical residue on the project sites shall be removed through appropriate methods.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
		Monitor operations and maintenance for compliance.	Metro	Operation
WR-12: Non-toxic alternatives for any necessary applications of herbicides or fertilizers shall be used.	Check design contract documents and construction specifications for compliance.	Metro	Final Design	
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
		Monitor operations and maintenance for compliance.	Metro	Operation
	WR-13: Detention basins shall be installed to remove suspended solids by settlement.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	WR-14: Water quality or runoff shall be periodically monitored before discharge from project sites and into the storm drainage system.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Cultural Resources	- Built Environment			
Construction- related direct and indirect adverse impacts to	CR/B-1: Documentation of historic properties and historical resources adversely affected by the project shall consist of the development of individual HABS/HAER submissions. The appropriate level of recordation shall be established in	Verify that adequate HABS/HAER documents have been prepared.	Metro, SHPO	Preliminary Engineering
historical resources could occur.	consultation with the California SHPO and formalized as a part of a Memorandum of Agreement as described in Section 4.12.1.4.5 of the Draft EIS/EIR and included in Appendix 3 of this Final EIS/EIR. The HABS/HAER documents shall be offered to the Library of Congress and the documents shall be prepared so that the original archival-quality documentation would be suitable for inclusion in the Library of Congress if the National Park Service accepts these materials. Archival copies of the documentation shall also be offered for donation to local repositories, including the Los Angeles Central Library and the Los Angeles Conservancy.	Verify level of recordation established by SHPO and MOA has been met.	Metro, SHPO	Preliminary Engineering

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	the project, a more detailed survey of historic properties and/or historical resources within 21 feet of vibration producing construction activity shall be conducted to confirm the building category, and to provide a baseline for	Verify that an adequate survey of historic properties and/or historical resources has been performed.	Metro	Preliminary Engineering
	monitoring of GBV and the potential for GBV to cause damage. The survey shall also be used to establish baseline, pre-construction conditions for historic properties and historical resources. During preliminary engineering and final design of the project, additional subsurface	Verify that adequate subsurface investigations have occurred.	Metro	Preliminary Engineering
	(geotechnical) investigations shall be undertaken to further evaluate soil, groundwater, seismic, and environmental conditions along the alignment. The analysis shall assist in the selection and development of appropriate support mechanisms for cut and cover construction areas and any sequential excavation method (mining) construction areas, in accordance with industry standards and the Building Code. The subsurface investigation shall also identify areas that could experience differential settlement as a result of using a TBM in close proximity to historic properties and/or historical resources. An architectural historian or historical architect who meets the Secretary of Interior's Professional Qualification Standards shall provide input and review of design contract documents prior to implementation of the mitigation measures.	Verify qualifications of architectural historian or historical architect, and ensure that review of design contract documents occurs prior to implementation of mitigation measures.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	protection measures as well as the geotechnical and vibration monitoring program shall be reviewed by an architectural historian or historical architect who meets the Secretary of Interior's Professional Qualification Standards to ensure that the measures would adequately protect the properties/resources. A post-construction survey shall also be undertaken to ensure that adverse effects or significant impacts have not occurred to historic properties or historical resources.	Verify qualifications of architectural historian or historical architect, and ensure that review of protection measures has occurred.	Metro	Final Design
		Verify that post- construction survey has occurred and no adverse effects or significant impacts would occur.	Metro	Post- Construction
	CR/B-4: For those historic properties and historical resources where adverse impacts are anticipated, a MOA	Confirm provisions of the MOA.	Metro, FTA, SHPO	Preliminary Engineering
	has been developed to resolve those adverse effects consistent with 36 CFR 800. This agreement, developed by FTA and Metro in consultation with the California SHPO and other consulting parties shall resolve and/or avoid, minimize, or mitigate potential effects to historic properties and/or historical resources. The agreement includes stipulations that outline the specific requirements for consultation and decision-making between the lead federal agency and consulting parties, specify the level of HABS/HAER recordation, and outline specific requirements for pre- and post-construction surveys, geotechnical investigations, building protection measures, and TBM specifications. See Appendix 3 (MOA) of this Final EIS/EIR for specific requirements.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	Fish, and Coast Imports building (to be removed) shall be offered for a period of one year following certification of the Final EIS/EIR for the price of \$1 to any party willing to move it off of the 1 <sup>st</sup> /Central Avenue station site at their own expense. Should no parties come forward, Metro shall incorporate materials from the building into the project facilities. Metro shall explore keeping portions of the building intact for use in the 1 <sup>st</sup> /Central Avenue station. Metro shall also offer to provide an exhibit commemorating the building at the JANM, the 1 <sup>st</sup> /Central Avenue station site, or other suitable location. An individual HABS/HAER submission shall be developed.	Verify that the offer to sell is extended for one year.	Metro	Pre-Construction
		Verify that HABS/HAER submission is completed.	Metro	Pre-Construction
		Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	CR/B-6: Facades of historic buildings adjacent to the construction areas shall be protected from accumulation of excessive dirt or shall be cleaned in an appropriate manner periodically while construction activities are occurring nearby.	Monitor construction activities for compliance.	Metro	Construction, Post- Construction
	See also GT-1 through GT-5.			
Significant GBN impacts could occur during construction and operations at Walt Disney Concert Hall.	See NV-18 through NV-24 and NV-27.			

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Built environment mitigation measures included in the MOA between the SHPO, Metro, and FTA shall be implemented as part of this MMRP. The full text of the MOA is attached to this MMRP.	See attached MOA.			
Cultural Resources	- Archaeology			
Unknown archaeological resources could be	procedures by a qualified lead archaeologist.	Verify qualifications of lead archaeologist.	Metro	Pre- Construction
disturbed during construction.		Verify that training occurs.	Metro	Pre- Construction
	ground-disturbing activities. The archaeological monitor	Verify qualifications of archaeological monitor.	Metro	Pre- Construction
	shall have authority to halt operations to examine potential resources and recover artifacts using professional archaeological methods.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	CR/A-3: A Native American cultural resources consultant from the Gabrielino/Tongva San Gabriel Band of Mission Indians and/or the Tongva Ancestral Territorial Tribal Nation shall be contacted to monitor ground-disturbing work if Native American cultural resources are discovered.	Identify a qualified Native American cultural resources consultant.	Metro, Gabrielino/Tong va San Gabriel Band of Mission Indians, and Tongva Ancestral Territorial Tribal Nation	Pre- Construction
		Monitor construction activities for compliance.	Metro	Pre- Construction
	CR/A-4: Work shall stop if human remains are found, and the Los Angeles County Coroner shall be notified immediately. If the remains are determined to be	Monitor construction activities for compliance.	Metro	Construction
	prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC), which will arrange for a Most Likely Descendent (MLD) to inspect the site within 48 hours and issue recommendations for scientific removal and nondestructive analysis.	Identify MLD and ensure timely inspection occurs.	NAHC	Construction
	CR/A-5: If no cultural resources are discovered during construction monitoring, the archaeological monitor shall submit a brief letter to that effect. If previously unidentified cultural resources are discovered in the course of construction monitoring, a report shall be prepared following Archaeological Resource Management Report (OHP 1990) guidelines that documents field and analysis results and interprets the data within an appropriate research context.	Verify that a letter or report has been prepared as appropriate.	Metro	Post- Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Disturbance of the Los Angeles Zanja System (CA-LAN- 887H and other	CR/A-6: A proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner shall be undertaken. This shall include using documentary research to identify, as	Verify that the identification and documentation program has been prepared.	Metro	Final Design
unnumbered zanjas), and sites CA-LAN-3588, P- 19-003338, and P- 19-003339 could occur during	P- alignments are expected to be affected by the proposed project, particularly where cut and cover or other near-surface construction techniques are planned in the vicinity	Check design contract documents and construction specifications for compliance.	Metro	Final Design
occur during of mapped zanja segments, full-time archaeological construction.  monitoring would be instituted to ensure documentation consistent with Section 4.12.2.4.2 of the Draft EIS/EIR.	Monitor construction activities for compliance.	Metro	Construction	
Archaeological mitigation measures included in the MOA between the SHPO, Metro, and FTA shall be implemented as part of this MMRP. The full text of the MOA is attached to this MMRP.	See attached MOA.	Verify implementation of MOA mitigation measures.	Metro	Final Design, Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Cultural Resources	- Paleontology			
Previously undiscovered paleontological	CR/P-1: A qualified paleontologist shall prepare a Paleontological Monitoring and Mitigation Plan for the proposed project and supervise monitoring of construction	Verify qualifications of paleontologist.	Metro	Final Design
resources may be disturbed during construction.	excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data.	Verify that an adequate Paleontological Monitoring and Mitigation Plan has been prepared.	Metro	Final Design
		Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro, Paleontological monitor	Construction
	CR/P-2: All project-related ground disturbances that could potentially affect the Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits would be monitored by a qualified paleontological monitor on a full-time basis (where feasible) because these	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	geologic sediments are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than five feet) within Quaternary younger alluvium would be monitored on a part-time basis to ensure that underlying sensitive units are not adversely affected. Construction monitoring during any tunneling activity is not warranted as any potential fossil specimens present within sensitive geologic units would be crushed and destroyed by the nature of tunneling methodology.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	CR/P-3: At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro, Paleontological monitor	Construction
	CR/P-4: Due to the likelihood of the presence of microfossils, matrix samples shall be collected and tested within the Puente Formation and Fernando Formation.  Testing for microfossils shall consist of screen-washing samples (approximately 30 pounds) to determine if	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	samples (approximately 30 pounds) to determine if significant fossils are present. Productive tests shall result in screen-washing of additional bulk matrix up to a maximum of 2,000 pounds per locality to ensure recovery of a scientifically significant sample.	Monitor construction activities for compliance.	Metro, Paleontological monitor	Construction
	CR/P-5: Recovered fossils shall be prepared to the point of curation, identified by qualified experts listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility such as the Natural History Museum of Los Angeles County.	Verify that a suitable repository has been identified and recovered fossils are reposited appropriately.	Metro	Construction
	CR/P-6: The paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum, with Metro and the identified repository.	Verify that an adequate report has been filed.	Metro	Post- Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe		
Parklands and Other	er Community Facilities					
Restriction of access to public services could occur due to construction	smart phone apps, and other modes typically used to communicate service announcements.	Check design contract documents and construction specifications for compliance.	Metro	Final Design		
activities.		Monitor construction activities for compliance.	Metro	Construction		
	PC-2: Where feasible and necessary, temporary removal of on-street parking to maximize the vehicular capacity at locations affected by construction closures shall be performed. Where temporarily eliminated, parking spaces will be restored to their prior striped or signed condition at the conclusion of the construction period.	Check design contract documents and construction specifications for compliance.	Metro	Final Design		
		Monitor construction activities for compliance.	Metro	Construction		
	See also AQ-15, CN-1, CN-3, CN-5, CN-6, TR-4, TR-5, DR-6, and EJ-1.					
Economic and Fisc	al Impacts					
Economic and	See DR-4 through DR-8.					
fiscal impacts of business and parking displacement due to project acquisitions.	EF-1: Metro shall develop measures to assist business owners significantly impacted by construction. These shall include temporary parking, marketing programs, and other measures developed jointly between Metro and affected businesses.	Oversee joint working group between Metro and affected business owners. Work individually with each business.	Metro, Joint working group	Preliminary Engineering, Final Design		
		Verify that all feasible, appropriate measures identified by the joint effort are implemented.	Metro, Joint working group	Construction		

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Safety and Security				
Safety and security concerns should be further minimized during operations through	SS-1: Fire alarm protection shall be provided within station areas as required by applicable laws, regulations, and standards.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
BMPs.		Verify that system is maintained in working order.	Metro	Operation
	SS-2: A minimum of two fire emergency routes shall be provided from each station as required by applicable laws, regulations, and standards.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Maintain exits in working order.	Metro	Operation
	SS-3: Adequate emergency ventilation and lighting shall be provided in each station in accordance with Metro Fire/Life Safety Standards and City of Los Angeles building codes.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that system is maintained in working order.	Metro	Operation
	SS-4: Communication systems between adjoining fire agencies shall be provided as required by applicable laws, regulations, and standards.	Check design contract documents and construction specifications for compliance.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
		Verify that system is maintained in working order.	Metro	Operation
	SS-5: A methane detection system shall be provided in each station as required by applicable laws, regulations, and standards.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that system is maintained in working order.	Metro	Operation
	SS-6: Building construction for underground stations shall not be less than Type I Construction as defined in the Uniform Building Code. All stations with more than two levels below-grade or where the lowest occupied level is more than 80 feet below-grade shall have protected level separation or other protection features to provide safe egress to exits.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	SS-7: All proposed mitigation measures regarding safety and security shall be implemented in a manner conformant to Metro's Rail Transit Design Criteria and Standards and Fire/Life Safety Criteria. A combination of the following measures shall be implemented as indicated by the Threat and Vulnerability Assessment: closed-circuit television system, emergency push-button call system for patrons, intrusion detection system, dedicated security patrol protocols and procedures, and crime prevention through environmental design.	Check design contract documents and construction specifications for compliance.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	SS-8: Proposed station designs shall not include design elements that obstruct visibility or observation, nor provide discrete locations favorable to crime. Proposed stations shall be lighted to avoid shadows. Pedestrian pathways shall include clear sight lines whenever feasible. Project sidewalk widths and placements shall be appropriately designed to accommodate a wide variety of users. The following criteria shall be used when designing project sidewalks: sidewalk and pedestrian bridge widths shall be designed with the widest dimensions feasible (at least ten feet) in conformance with Metro's adopted land use and transportation policies; minimum sidewalk widths shall not be less than those allowed by the State of California Title 24 access requirements or the ADA design recommendations; where practicable, pedestrian movements and flows shall be favored over other transportation modes, such as automobile access; and stations shall be fully accessible as defined by ADA.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	SS-9: An ADA accessible connection for the 2 <sup>nd</sup> /Hope Street station to Upper Grand Avenue shall be provided. The future Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2 <sup>nd</sup> /Hope Street station to Upper Grand Avenue, an elevator from the station entrance to the plaza shall be built as part of this alternative if one is not already provided. If the plaza is not built, a pedestrian connection (such as a pedestrian bridge) shall be constructed. The connection shall reduce conflicts between pedestrians and vehicles.	Check design contract documents and construction specifications for compliance.	Metro	Final Design

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	SS-10: Adequate pedestrian queuing and refuge areas shall be provided at the proposed stations to facilitate pedestrian mobility. Adequately wide crosswalks shall be provided in the areas immediately around the proposed stations.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	SS-11: All proposed stations shall be equipped with monitoring equipment, which shall primarily consist of video surveillance to monitor strategic areas of the stations and walkways and/or be monitored by Metro security personnel	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	n	Verify that system is maintained in working order.	Metro	Operation
	SS-12: Metro shall implement a security plan for LRT operations to include both in-car and station surveillance by Metro security or other local jurisdiction security personnel. Metro shall coordinate and consult with the Los Angeles	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	Fire Department, Los Angeles Police Department, and the Los Angeles County Sheriff Department as appropriate to develop safety and security plans for the proposed alignment and station areas.	Verify that system is maintained in working order.	Metro	Operation
	safety features that reduce the potential for persons to contact the vehicle coupler and/or fall under the train.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that features are maintained in working order.	Metro	Operation

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	in public occupancy areas as required by regulation.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Verify that features are maintained in working order.	Metro	Operation
Safety and security concerns should be further minimized during	involving sidewalks, entrances to buildings, lobbies, corridors, aisles, stairways, and vehicular roadways with appropriate guardrails, barricades, temporary fences, overhead protection, temporary partitions, shields, and adequate visibility. Metro shall keep sidewalks, entrances	Check design contract documents and construction specifications for compliance.	Metro	Final Design
through BMPs.  adequate visibility. Metro shall keep sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, or exits that remain in use by the public clear of obstructions. Metro shall post appropriate warnings, signs, and instructional safety signs. These requirements shall be included in the construction specifications.  SS-16: An education safety and outreach campaign shall		Monitor construction activities for compliance.	Metro	Construction
	Monitor construction activities for compliance.	Metro	Construction	
	See also CN-1 through CN-3, TR-4, and DR-7.		1	1

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Environmental Just	tice			
Temporary bus re- routing or stop closures may be needed in Little Tokyo during construction.	See TR-12 and TR-13.			
Disproportionate amounts of parking spaces would be temporarily	EJ-1: The temporary displacement of three bus loading spaces on Alameda Street for the JANM shall be replaced nearby for the duration of construction activities. Metro shall work with JANM to confirm locations of temporary loading spaces.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
removed in Little Tokyo during construction (i.e., more parking	loading spaces.	Monitor construction activities for compliance.	Metro	Construction
spaces would be removed in Little Tokyo than in other parts of the project area). This could	Little Tokyo during construction shall be temporarily replaced within one block of the land uses that rely on those spaces, or through a combination of measures DR-4,	Check design contract documents and construction specifications for compliance.	Metro	Final Design
impact the community, including businesses.	and EJ-3 through EJ-9.	Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	Mangrove property (northeast of 1 <sup>st</sup> and Alameda Streets) do for the purposes of providing alternative parking services co	Check design contract documents and construction specifications for compliance.	Metro	Final Design
	up/drop-off in the central business areas of Little Tokyo, and standard self-parking. The number of spaces provided would range from 200 standard spaces to approximately 300 spaces when supplemental parking services are operating. Any parking services shall be operated by a licensed/bonded parking company and shall be selected through a competitive request for proposal (RFP) process. Cost to park shall be comparable with current cost to park. This shall offset the temporary loss of parking available to patrons of Little Tokyo businesses, and other visitors, during construction.	Monitor construction activities for compliance.	Metro, Parking Contractor	Construction
	EJ-4: Metro shall provide notices of traffic control plans and parking relocations on its website, smart phone apps, and other modes typically used to communicate service announcements.	Verify implementation of noticing procedures.	Metro	Construction
	EJ-5: Metro shall support efforts to curb non-legitimate use of disabled parking spaces.	Verify agency support.	Metro	Construction, Operation
	parking lots, and businesses to develop an advanced	Verify that agency and community coordination has occurred.	Metro, LADOT, Little Tokyo stakeholders	Final Design
		Verify implementation and maintenance of system.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	EJ-7: Metro shall work with LADOT to open city parking lots for short-term use on evenings and weekends during construction in the vicinity of Little Tokyo.	Verify that agency coordination has occurred.	Metro	Final Design
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Verify parking lot adherence to extended hours.	Metro	Construction
	EJ-8: Metro shall work with the City of Los Angeles to reduce impacts of government vehicles parking on 2 <sup>nd</sup> Street during construction, such as identification of alternate parking areas.	Verify that agency coordination has occurred.	Metro	Final Design
	Little Tokyo Business Improvement District to facilitate creation of financial incentives such as parking validation programs to prioritize parking for Little Tokyo customers, residents, and businesses during construction.	Verify that agency coordination has occurred.	Metro	Final Design
		Monitor implementation of any financial incentive parking programs.	Metro	Construction
	EJ-10: Metro shall identify which restaurants within Little Tokyo would be interested in establishing curbside pickup. Metro shall work with the City of Los Angeles to allow temporary curbside parking during construction, which	Verify that community and City of Los Angeles coordination has occurred.	Metro, LADOT, Little Tokyo stakeholders	Final Design
	would allow Metro to establish curbside pickup for Little Tokyo restaurants.	Check design contract documents for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	parking needs assessment in Little Tokyo. Metro shall provide replacement parking for spaces lost as a result of the project as described in EJ-3 and to respond to the needs identified in the parking needs assessment. Metro shall work with Little Tokyo and surrounding communities to educate visitors and residents where parking is available during construction. Metro shall monitor parking, and the parking analysis shall be conducted on an annual basis throughout the duration of construction. This effort shall include new signage and other wayfinding features as appropriate.	Verify that an independent parking needs assessment has been performed.	Metro	Final Design
		If demand exceeds supply, check design contract documents for permanent replacement parking provisions.	Metro	Final Design
		If demand exceeds supply, verify that replacement parking has been opened.	Metro	Pre-Construction
		If demand exceeds supply, verify that replacement parking is maintained.	Metro	Construction
		If supply exceeds demand, verify that meetings with the Little Tokyo community and surrounding communities have occurred.	Metro	Final Design
		If supply exceeds demand, verify that signage and any other appropriate way finding features have been placed and are maintained.	Metro	Pre- Construction, Construction
	See also DR-4 through DR-5.			1

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Disproportionate community and neighborhood impacts could occur in Little	EJ-12: Metro shall provide assistance for businesses to maintain visibility during construction, including signage and advertisements.	Verify that signage and advertisements have been placed and are maintained.	Metro	Construction
Tokyo during construction.	See also CN-1 through CN-7, DR-6, DR-7, TR-1, TR-2, TR-4	, TR-5, EJ-2 through EJ-10, E	J-15, EJ-16, EJ-17	, and EJ-19.
Disproportionate reductions of access to community facilities and businesses could occur in Little Tokyo during construction.	See TR-1 and EJ-1.			
Disproportionate property acquisitions and business relocations would occur in Little	EJ-13: Should parcels used for construction staging be proposed for redevelopment in the future, Metro is committed to involving the community in the redevelopment of construction staging areas following completion of construction activities. Metro shall do this through its established Joint Development Policy.	Verify that community input has been incorporated into redevelopment proposals.	Metro, Little Tokyo stakeholders	Construction, Post- Construction
Tokyo.	See also DR-8 and EJ-15.			
Disproportionate long-term displacement of commercial space could result in Little Tokyo.	EJ-14: Displaced commercial space in Little Tokyo shall be replaced with high quality commercial development opportunities consistent with Little Tokyo's community identity. This could include development at the 1 <sup>st</sup> /Central Avenue station site. Depending on the type of new development, it would potentially create at least as many jobs as had been displaced.	Verify that opportunities for development of the 1 <sup>st</sup> /Central Avenue station site and the Mangrove property are being actively sought.	Metro	Post- Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	EJ-15: Metro shall work with the Little Tokyo and Arts District communities and the Community Redevelopment Agency of the City of Los Angeles (CRA/LA) to create joint development opportunities for the 1 <sup>st</sup> /Central Avenue station site.	Verify that input from CRA/LA and the Little Tokyo community has been received and incorporated into potential joint development opportunities.	Metro, CRA/LA, Little Tokyo stakeholders	Construction, Post- Construction
	See also EJ-13.			
Disproportionate visual alteration of the Little Tokyo neighborhood could occur due to removal of structures for the 1st/Central Avenue station.	See CN-7, EJ-14 and EJ-15.			
Disproportionate GBV impacts could occur in Little Tokyo during construction.	See NV-25 and NV-26.			

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
economic and Little Tokyo businesses and organizations during fiscal impacts to construction such as targeted advertising and marketing	Verify that community input has been incorporated into implementation plan.	Metro, Little Tokyo stakeholders	Final Design	
during construction.	community events. Metro shall provide free technical support assistance (i.e., website development) to local businesses on strategies for business development that can minimize any adverse impacts of construction. This can include, but not be limited to, assistance with accounting or advertising. Metro shall work with the RCCLC including businesses, tenants, property owners, and government agencies with jurisdiction to make policy to resolve issues arising from adverse business issues during all phases of construction. The committee shall work to develop an implementation plan for these services and determine their content. The committee shall also be kept apprised of construction progress and upcoming transit, parking, or access changes. Metro shall provide maps showing existing and planned access during all phases of construction. Metro shall also provide directional signage to temporary parking facilities. These activities shall be conducted in a manner consistent with the similar program developed for the Crenshaw Transit Corridor Project.	Verify implementation of specified services and ongoing involvement of the RCCLC.	Metro	Construction
curtailed to the extent feasible during major Little Tokyo festivals and outdoor events to ensure that noise, air quality, traffic, and parking issues do not adversely affect these economically vital events. Metro shall request a list of events and festivities from the Little Tokyo community.	Check design contract documents and construction specifications for compliance.	Metro	Final Design	
	Verify that community has provided a schedule of events.	Metro, Little Tokyo stakeholders	Final Design, Construction	

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
		Monitor construction activities for compliance.	Metro	Construction
	See also CN-3 and EJ-2 through EJ-12.			
	EJ-18: Metro shall work with the Little Tokyo Business Association to help offset the neighborhood impacts associated with reduced revenue from the Business Improvement District funds during construction due to the	Verify that community input has been incorporated into implementation plan.	Metro, Little Tokyo stakeholders	Final Design
	removal of acquired businesses. Metro shall also offer the services described in EJ-16. Metro shall use Metro's existing claims process to address physical damage (utility interruption, for example).	Verify implementation of specified services.	Metro	Construction
	EJ-19: Metro shall work with the Little Tokyo community businesses to minimize adverse impacts to business operations associated with utility relocation and protection of existing utilities. Metro shall offer the services described in TR-4, EJ-12, and CN-4.	Verify that community input has been incorporated into implementation plan.	Metro, Little Tokyo stakeholders	Final Design
	III TR-4, EJ-12, and GN-4.	Verify implementation of specified services.	Metro	Construction
Disproportionate adverse transportation impacts could occur in Little Tokyo during construction.	EJ-20: Metro shall provide advertising on its transit buses and other typical means of communication publicizing construction plans and alternatives to travel and park in Little Tokyo during the construction period. Metro shall also place these advertisements on construction site walls if the community desires.	Verify implementation of advertisement services.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	EJ-21: Metro shall avoid haul routes along 1 <sup>st</sup> Street or along Alameda Street between 3 <sup>rd</sup> Street and US 101 where possible. Haul routes shall be confirmed with the input of the community.	Verify that community input into haul routes has occurred.	Metro	Final Design
		Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction
	See also EJ-1, EJ-2 through EJ-12, EJ-16, EJ-17, CN-3, and	CN-7.		
Construction activities would be disproportionately centered in Little	EJ-22: Metro shall publish safety and security information at stations in Japanese, Korean, and Spanish. This includes both written and verbal announcements at stations.	Verify implementation and maintenance of signage and announcements.	Metro	Construction, Operation
Tokyo, as would the associated safety and security	EJ-23: Metro shall publish materials for the project's safety education campaign in Japanese, Korean, and Spanish.	Verify publication of materials.	Metro	Construction, Operation
needs.	EJ-24: Metro shall involve the Little Tokyo Public Safety Association in the development of safety and security plans.	Verify that input from Little Tokyo Public Safety Association has been incorporated.	Metro, Little Tokyo Public Safety Association	Final Design, Construction
		Monitor construction and operation for compliance.	Metro	Construction, Operation
	EJ-25: Metro shall monitor and ensure implementation of committed mitigation measures designed to address safety and security concerns.	Verify implementation and maintenance of measures.	Metro	Construction
	See also EJ-18.			

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe	
More operation noise may be audible in Little Tokyo than other	EJ-26: Depending on the potential location and scope of the system's ventilation equipment, orient the exhaust away from downwind receptors to minimize noise from ventilation as well as underground train horns and related operational sounds.	Check design contract documents and construction specifications for compliance.	Metro	Final Design	
parts of the alignment due to the portals and open-roof station.	Sourius.	Monitor construction activities for compliance.	Metro	Construction	
Construction activities would be disproportionately	EJ-27: Metro shall implement receptor-based mitigation where needed to reduce construction-related pollutant levels below significance thresholds. This could include installation of high efficiency particulate air filters on HVAC	Verify implementation of receptor-based mitigation measures.	Metro	Pre- Construction, Construction	
centered in Little Tokyo, as would the associated air quality impacts.	equipment at downwind receptors during construction activities.	Monitor construction activities for compliance.	Metro	Construction	
<b>47</b>	See also AQ-1 through AQ-5, AQ-7, AQ-8, AQ-10, EJ-17, and EJ-26.				
Land use impacts could occur in Little Tokyo.	EJ-28: Metro shall maximize opportunities to the extent feasible for enhancing access from existing land uses to the new station.	Verify implementation of program.	Metro	Final Design, Construction	
	See also EJ-15 and EJ-26.				
Tunneling beneath existing buildings in Little Tokyo	EJ-29: Design of underground facilities shall avoid potential subsurface impacts to adjacent buildings.	Check preliminary engineering documents for compliance.	Metro	Preliminary Engineering	
would introduce the potential risk of subsurface impacts.	See also GT-1 through GT-5.				

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
Tree removal would occur in Little Tokyo.	EJ-30: New trees planted at station locations shall be regularly monitored by Metro to ensure healthy growth and development. Metro shall replace trees as close as possible to original locations.	Monitor trees.	Metro	Operation
	EJ-31: Metro shall provide the Little Tokyo and Arts District communities with opportunities for input into the development of landscape plans for the 1 <sup>st</sup> /Central Avenue station throughout the preliminary engineering and final design processes.	Verify incorporation of Little Tokyo Community Council input into landscape plans.	Metro	Preliminary Engineering, Final Design
Foreign-language speakers would need to access project meetings and information.	EJ-32: Information shall be made available in Japanese and Korean, and flyers for project meetings shall indicate that there will be both Japanese and Korean translators present.	Verify provision of information in Japanese and Korean.	Metro	Ongoing
TBM operations would be disproportionately concentrated in the vicinity of Little Tokyo.	EJ-33: Metro shall require the construction contractor to perform TBM operations for a period not extending beyond 48 months. This limit may need to be raised should circumstances arise that are beyond the control of Metro and the construction contractor. The community shall be notified if such a situation occurs.	Monitor construction activities for compliance.	Metro	Construction
	EJ-34: Metro shall prepare a procedure for rapid shut-down of construction should maximum acceptable vibration thresholds be reached.	Check design contract documents and construction specifications for compliance.	Metro	Final Design
		Monitor construction activities for compliance.	Metro	Construction

Table 8-1. Mitigation Monitoring and Reporting Program (continued)

Impact	Mitigation Measure(s)	Monitoring Action(s)	Responsible Party	Timeframe
	EJ-35: Metro shall prepare a cost-benefit analysis of using one versus two TBMs, and shall select the least impactful cost-effective solution.	Check preliminary engineering documents for compliance.	Metro	Preliminary Engineering
Construction Impacts				
Mitigation measures for construction-related impacts are discussed in the preceding sections.				

#### Attachment B:

Summary of Comments and Responses to Comments on the

Final Environmental Impact Statement (Final EIS)

The Notice of Availability of the Final Environmental Impact Statement/Environmental Impact Report (Final EIS) was published in the Federal Register on January 20, 2012. The review period concluded on February 20, 2012.

#### Agency Comments Received on the Final EIS during the Review Period and Responses

The Federal Transit Administration (FTA) received five (5) letters from local, state, and federal agencies commenting on the Final EIS. The U.S. Environmental Protection Agency commented that the agency had no further concerns with the proposed project. The Federal Aviation Administration (FAA) commented that the project does not affect any FAA facilities or airports in the area and had no further comments on the project.

The City of Los Angeles Department of Transportation (LADOT) Transit Corridors and Bikeways Division commented that the Locally Preferred Alternative (LPA) and mitigation measures will need to be approved by the Major Transit and Transportation Construction Traffic Management Committee (MTTCTMC). Los Angeles County Metropolitan Transportation Authority (LACMTA) should make provisions for the bicycle lanes in the final design per the most current LADOT design standards. Permanent loss of parking generates great concern from businesses and local communities. LADOT encouraged LACMTA to consider mitigation measures for the permanent loss of parking in the downtown area. FTA's response refers LADOT to the Final EIS which notes that alternate parking locations are available in the area, and the addition of a transit station to the area would likely cause some people to ride transit instead of driving, thus reducing the overall need for parking.

The City of Los Angeles Wastewater Engineering Service Division Bureau of Sanitation had no additional comments. The County of Los Angeles Fire Department commented that the project does not appear to have any impact on the emergency responsibilities of the Department. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. Areas germane to the above were addressed in the Final EIS.

#### Public Comments Received on the Final EIS During the Comment Period and Responses

Through the close of the review period, twenty-eight (28) comment letters or emails were received from public individuals or groups. Most of these comments were similar to comments submitted on the Draft EIS and the Supplemental Environmental Assessment/Recirculated Environmental Impact Report (SEA/RDEIR). The Final EIS contains the FTA response to those comments. Nevertheless, FTA reconsidered the duplicative comments and the new comments before making the decision presented in this ROD. New comments generally pertain to refinements to the Locally Preferred Alternative (LPA) since the Draft EIS was published, or to the FTA response to previous comments made by the individual or organization. Seven (7) of the letters or emails were related to construction impacts in the Financial District. Eighteen (18) of the comment letters or emails were similar to previous comments on the Draft EIS, were new comments on the refinements to the LPA since the Draft EIS was published, or were specific to the Final EIS document, but not notably different than comments previously received. Three comments were unrelated to the Regional Connector project. The themes presented in the comments are:

- Construction impacts in the Financial District
- Impacts in Little Tokyo
- Impact to the LA Times property
- Start of construction
- A future 5<sup>th</sup> and Flower Station
- Comments related to methane gas mitigation, standards to be used, level of fire, police and emergency services, handling of excavations, air quality monitoring stations, lack of bathrooms and drinking fountains
- Service from Atlantic Ave straight to Pasadena and back
- Elimination of a station entrance at 3<sup>rd</sup> and Flower
- Metropolitan News parcel not being removed from all alternatives
- Station entrance technology
- Impacts to the Colburn School of Music

Seven letters were received regarding construction in the Financial District. The concerns included continuing tunnel boring machine (TBM) farther south on Flower Street to reduce or eliminate cut and cover construction, maintaining access to various buildings and parking structures along Flower, potential construction noise and vibration impacts, potential traffic impacts, removing the pocket track along Flower Street, and potential impacts to on-street parking.

Following the LACMTA Board meeting in February 2012, LACMTA staff entered discussions with interests from the Financial District to resolve these concerns. The pocket track was removed from the LPA. The following refinements to the project definition and mitigation measures were approved by the LACMTA Board at the April 26, 2012 meeting:

- The width and length of any construction worksite on Flower Street south of 4<sup>th</sup> Street will be minimized to the greatest extent feasible;
- South of 4<sup>th</sup> Street, construction decking shall be no higher than 10", if feasible, above the existing grade, and flush with existing curb on the east and west side of Flower Street with a maximum cross gradient of 3%;
- No construction worker parking on Flower and adjacent streets during construction. Consider obtaining temporary parking in the West Lawn Garage for construction workers;
- Enhancements to the pedestrian walkway along the east side of Flower Street between 4<sup>th</sup> and 7<sup>th</sup> Streets shall not permanently eliminate a southbound traffic lane on Flower Street;
- Restore Flower Street travel lanes after construction to the existing six lane condition from 4th to 6th Streets and the existing four lane condition from 6<sup>th</sup> to 7<sup>th</sup> Streets;
- Along Flower Street, accelerate the construction schedule to the greatest extent feasible, consistent with budgetary and other constraints;
- Minimize surface disruptions along Flower Street from truck trips, utility relocation, decking installation and removal, street restoration, or TBM removal, when feasible;
- Detailed surveys of the structural conditions of the Flower Street properties shall be performed prior to and at the end of construction;
- Shoring design for cut and cover construction along Flower Street will account for adjacent buildings;
- Noise and vibration levels will be monitored at Flower Street properties during construction;
- If construction and or operational ground-borne noise limits or ground-borne vibration limits are exceeded
  according to thresholds in the FTA Noise and Vibration Guidance, LACMTA will take action to reduce noise
  and vibrations at the property lines of sensitive uses;
- No pile drivers will be used along Flower Street during construction. If necessary, piles will be drilled or vibrated, but not driven;
- Install and monitor deformation monitoring systems along Flower Street during construction;
- Reduced noise mufflers, air-inlet silencers, shrouds or sound walls will be used for generators, compressors, fans, exhaust systems and other inherently noisy construction equipment;
- Provide assistance for Flower Street businesses to maintain visibility during construction, including signage and advertisements;
- Ensure there is daily cleaning/washing during non-peak hours of Financial District streets affected by excavation and hauling;
- Provide protective measures, such as pipe and conduit support systems, vibration and settlement monitoring, trench sheeting, and shoring to avoid potential damage to utilities during construction;

- Maintain access to utilities for technicians, at all times during construction; and
- Assign a full-time ombudsperson who is authorized to resolve complaints relative to the Project.
- On Flower Street between 5<sup>th</sup> and 6<sup>th</sup> Streets, where cut and cover is necessary, maintain four travel lanes between 5AM and 8PM during weekdays for the period between the completion of the decking installation to the commencement of removal of decking.
- On Flower Street between 5<sup>th</sup> and 6<sup>th</sup> Streets, maintain no less than two travel lanes between 8PM and 6AM, except for those times when further street restrictions are required to facilitate decking installation and removal.

In response to public comments, at the April 26, 2012 Board meeting, the LACMTA Board adopted a motion that directs LACMTA staff to continue to meet with the Flower Street stakeholders and to examine value engineering and cost methods to determine if refined mitigations for construction impacts in the Financial District can be accommodated within the Life of Project (LOP) Budget and report back to the Board in 60 days. If these features can be completed within the current LOP budget, the LPA will be amended to include these features. Should these features exceed the LOP budget, the design features shall be included as proposal options during the construction procurement to allow proposers a process to include each feature and determine if it can be accomplished within the LOP budget.

#### Impacts in Little Tokyo

Comments regarding impacts to Little Tokyo included removing the Little Tokyo/Arts District Station, LACMTA's commitment to mitigation measures in Little Tokyo during construction, impacts to parking in Little Tokyo, and potential noise and vibration impacts.

Relocating the Little Tokyo/Arts District to a new underground station minimizes property required and eliminates the cut-and-cover segment on 2<sup>nd</sup> Street in Little Tokyo originally required for construction. This eliminates the associated traffic, air quality, noise, right-of-way and other effects related to cut-and-cover construction. FTA and LACMTA are committed to the mitigation measures as included in Attachment A to this Record of Decision. Per measure EJ-3 in the Mitigation Monitoring and Reporting Program (MMRP), two acres of land shall be provided on the Mangrove property for the purposes of providing alternative parking services during construction. Parking services would include satellite parking served by shuttle buses or other parking services in the business area of Little Tokyo. Mitigation measures NV-19, NV-21, NV-22, NV,23, NV-27, and TR-1 specifically apply to the Japanese Village Plaza.

#### **Impact to the LA Times Property**

The Los Angeles Times asserts that the Final EIS does not adequately identify other parking in the vicinity of the parcel to be acquired at 2<sup>nd</sup> and Broadway Street or the future location of the tank to be relocated. Alternate parking locations are available in the area, and the addition of a transit station to the area would likely cause some people to ride transit instead of driving, thus reducing the overall need for parking. LACMTA will coordinate with the LA Times to develop an appropriate location for the tank based on the specific requirements and appropriate safety considerations.

#### **Start of Construction**

One comment inquired when construction would start. Final design is expected to take one to two years after the Record of Decision. Construction would begin when design is complete and a contractor has been obtained. Construction is estimated to begin as early as 2013.

#### Not to Preclude Future 5th and Flower Station

One commenter requested that a future 5<sup>th</sup> and Flower Street Station not be precluded in the project design. The Final EIS includes a statement that the LPA does not preclude the opportunity to install a future station north of 5th and Flower Streets.

Comments Related To Methane Gas Mitigation, Standards to be Used, Level Of Fire, Police and Emergency Services, Handling of Excavations, Air Quality Monitoring Stations, Lack of Bathrooms and Drinking Fountains

One commenter asked about the reporting, inspections and continued compliance of the mitigation measures with respect to methane and other gases. The comment further asks at what levels will fire, police and emergency

services be staffed and what is the anticipated response time under an emergency situation? How would evacuations be handled? What air quality monitoring stations will be employed and will a "methane flush" be required. Why are bathrooms and drinking fountains not included?

Construction of the project shall be consistent with the City of Los Angeles Methane Mitigation Standards, established in accordance with City of Los Angeles Ordinance No. 175790 and No. 180619. Specialized excavation methods and equipment shall be implemented to protect workers and the public from exposure to toxic gases and prevent explosions. Early notification of traffic disruption shall be given to emergency service providers. Specific air quality monitoring stations have not yet been identified. Bathrooms and drinking fountains are not provided as part of the Metro rail system for reasons related to cost of construction and maintenance, and cost and consequences related to safety and security. Most urban rail systems in the U.S. do not provide bathrooms and drinking fountains.

#### Service from Atlantic Avenue to Pasadena

One commenter asked if the Gold Line trains from Atlantic Avenue would go straight to Pasadena and back as they do now. The Regional Connector will allow one-seat; one-ride from east to west and north to south. Service from East Los Angeles to Pasadena will be provided with a transfer at the Little Tokyo/Arts District Station.

#### Elimination of Station Entrance at 3rd and Flower

The Sierra Club expressed concern that the station entrance at 3<sup>rd</sup> and Flower would be eliminated. FTA and LACMTA believe the station entrances as currently shown adequately address various communities in the corridor. During the Preliminary Engineering Phase, knock out panels are being considered at the stations to allow for future entrances.

#### Metropolitan News Parcel Not Being Removed From All Alternatives

The Metropolitan News noted that reference to their parcel had been removed with respect to the LPA but had not been removed from all alternatives. As noted, the Metropolitan News parcel was removed from the LPA. The remaining alternatives were carried forward from the Draft EIS, but were not refined further in the Final EIS.

#### **Station Entrance Technology**

One commenter suggested using Utrecht's "transfer accelerator," which is a slide employed at one of the Dutch city's subway stations, for one of the new Regional Connector station entrances. This technology is not currently under consideration for this project.

#### **Noise Impacts to the Colburn School**

Two comments noted that an acoustic impact study has not been performed at the Colburn School. The letters added that such a study is a crucial step for LACMTA to uphold the MMRP commitment to not negatively impact the acoustic quality of the School's facility. Additional noise studies were conducted for Walt Disney Concert Hall. Since the two facilities were close proximity to each other and similar in noise sensitivity, the noise study results were verified for applicability to the Colburn School. (Refer to Appendix 2 of the Final EIS). Mitigation for the Walt Disney Concert Hall has been modified to also apply to the Colburn School.

#### **Comments Received on the Final EIS After the Review Period and Responses**

The review period to receive public and agency comments concluded on February 20, 2012. The project went before the Board at the February 23, 2012 meeting. At that meeting, the Board requested staff continue to work with stakeholders to resolve concerns with respect to construction impacts in the Financial District and Little Tokyo. On April 26, 2012, the LACMTA Board approved the project definition that incorporated several design refinements and mitigation measures. After the review period of the Final EIS ended, nine additional public comments were received.

#### **Impact to the LA Times Property**

The Los Angeles Times commented regarding its concern that a station entrance is located in the parking lot in the middle of the campus. The Los Angeles Times requested the Board consider the proposed station entrance in an alternate location. However, if the station entrance is not relocated, the Los Angeles Times wishes to provide input regarding the design of the station.

The Los Angeles Times parking lot would be converted to a station plaza with a station entrance. The parking lot is currently fenced and thus already provides a barrier across the parcel. Removing the parking lot and fence and

providing a station entrance will provide better access to and from the Times campus. LACMTA will be seeking public and interested parties input in station design in the next phase of engineering following the Record of Decision.

#### Construction Impacts adjacent the Los Angeles Central Library and Maguire Gardens

The West Lawn Coalition and the Central Library expressed concern on construction impacts adjacent the Los Angeles Central Library and Maguire Gardens. The Final EIS addresses potential construction impacts on the sidewalks adjacent these buildings, but no impacts to the grounds of either building were anticipated. LACMTA adopted the following measures as part of the project definition in the April 26, 2012 Board report:

- Maintain access from Flower Street between 5<sup>th</sup> and 6<sup>th</sup> Streets to the West Lawn Garage;
- Any areas adjacent to the Maguire Gardens and Central Library impacted by construction will be returned to their original or improved state, with oversight by the Library Gardens Committee;
- Require that any public spaces, gardens, plazas, walkways, sidewalks, trees, street furniture, landscaping, hardscaping or pedestrian areas, including but not limited to the Library Gardens and the Citigroup Plaza, which are impacted, damaged or altered as a result of construction activity and / or staging, be reconstructed, replanted, repaired and replaced like-for-like at the end of construction activity in that vicinity.

#### **Impacts in Little Tokyo**

The Little Tokyo Community Council identified outstanding concerns they did not feel were adequately addressed in the Final EIS. These included marketing support for Little Tokyo businesses, a business interruption fund, and parking-related services. The MMRP includes the following measures that address these concerns:

- Per EJ-3, two acres of land shall be provided on the Mangrove property for the purposes of providing alternative parking services during construction which would include satellite parking served by shuttle buses or other parking services in the business area of Little Tokyo. Any parking services shall be operated by a licensed/bonded parking company selected through a Request for Proposal process. The appropriate parking service provided will be determined with the participation of the Regional Connector Community Leadership Council (RCCLC), Little Tokyo Community Council (LTCC), and/or other subcommittee. Through the RCCLC, LTCC, and other community groups it shall assess the feasibility of establishing a shuttle service connecting local parking lots and Little Tokyo/Arts District with destinations in downtown.
- Per EJ-16, targeted advertising and marketing campaigns shall be provided as determined by the RCCLC, LTCC and/or other community based groups. An MOU agreement shall be developed to implement the process. The MOU will include but not limited to provide the following:
  - Marketing and Merchant Support
  - Technical and Business Assistance
  - Business Interruption Program to provide an expeditious standard for claims resolution and reimbursement
  - Marketing Services and Branding Campaign
  - Merchant Discounts and Incentives/Rewards Program
  - Signage (for businesses and access)
  - Special Event Planning (including support)
- The designation of a Construction Relations Manager to serve as the point person for all community concerns regarding the project prior to construction. This person will be responsible for the entire project area and funded from the project budget.

#### Impacts at 2<sup>nd</sup>/ Hope Street Station

Veolia Energy the owners of the land, land improvements and Central Plant commented that the project would create substantial impacts that could greatly harm the potential future development of the portion of the Central Plant site that is not devoted to providing chilled water, hot water and steam to the Downtown community.

The Final EIS discloses partial takes for construction staging on this parcel. Construction of the LPA is expected to result in a partial take of this site for construction staging and the proposed 2nd/Hope Street Station. The part of the

parcel that would be utilized for construction staging is currently used for parking and is the primary access point to the Central Plant. During construction, this access point would remain available and replacement parking would be required. Adverse impacts could result if replacement parking was not provided or if access was inhibited or eliminated to the Central Plant. Mitigation measures described in the MMRP have been developed to reduce this potential impact. The station entrance on 3<sup>rd</sup> and Flower will not be built at this time but a knock-out panel to tie into future development will be included.

#### **Construction impacts in the Financial District**

A council member of the City of Los Angeles urged LACMTA to work diligently with the downtown property owners to identify all feasible mitigation measures to reduce construction impacts in the Financial District.

Hines, the owner of Citigroup Center, and other property owners in the Financial District reiterated their comments on the SEA/RDEIR and the Final EIS, particularly their concerns on construction impacts along Flower Street. The commenters requested consideration of extending the use of the TBM further along Flower Street past 4<sup>th</sup> Street and additional measures to minimize surface disruption and traffic impacts during construction. The comments assert that a narrower footprint for the rail lines is feasible and that the areas with tie-backs could be avoided and thus allow tunneling, which would mitigate construction impacts.

The LPA, as described in the Final EIS, provides for the use of the TBM under Flower Street up to the intersection of 4<sup>th</sup> Street and Flower Street. The tiebacks extend through the center of the street at a depth that will affect the TBM as it rises to the 7<sup>th</sup> Street Metro Center Station Tail Tracks. A six percent grade is the maximum for Metro rail operations. With that grade and with the length of the tiebacks, tiebacks cannot be avoided.

At the April 26, 2012 Board meeting, the LACMTA Board adopted a motion that directs LACMTA staff to continue to meet with the Flower Street stakeholders and to examine value engineering and cost methods to determine if refined mitigations for construction impacts in the Financial District can be accommodated within the Life of Project (LOP) Budget and report back to the Board in 60 days. If these design features can be completed within the current LOP budget, the LPA will be amended to include these features. Should these features exceed the LOP budget, the design features shall be included as proposal options during the construction procurement to allow proposer a process to include each feature and determine if it can be accomplished within the LOP budget.

#### Attachment C

Relevant Correspondence

May 2012

U.S Department of Transportation

Federal Aviation Administration Western-Pacific Region Office of Regional Administrator P.O. Box 92007 Los Angeles, CA 90009-2007

JAN 27 2012

Mr. Arthur T. Leahy Chief Executive Officer Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012-2592 IMAGED

FEB 01 2012

RECORDS MANAGEMENT CENTER

Dear Mr. Leahy:

This letter is in response to your January 19, 2012, letter to the Federal Aviation Administration (FAA), regarding the proposed Regional Connector Transit Project through downtown Los Angeles. Your letter notified the FAA that the Los Angeles County Metropolitan Transportation Authority has prepared the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR), for the proposed project. The project is an approximate 2-mile rail link in the downtown Los Angeles area.

In a letter dated September 27, 2010, we previously provided comments regarding review of the Draft EIS/EIR for the project. We indicated our Los Angeles Airports District Office had reviewed the draft environmental documentation for the project and since the project is in the downtown area, it does not affect any FAA facilities or airports in the area. The FAA has no further comments on the project.

If you have any questions, you may contact Mr. David Cushing, Manager of our Los Angeles Airports District Office at 310-725-3644.

Sincerely,

William C. Withycombe Regional Administrator



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

February 17, 2012

Mr. Ray Tellis Federal Transit Administration Los Angeles Metropolitan Office 888 S. Figueroa Street, Suite 1850 Los Angeles, California 90017

Subject: Final Environmental Impact Statement for the Regional Connector Transit Corridor

Project, Los Angeles, California (CEQ # 20120011)

Dear Mr. Tellis:

The Environmental Protection Agency (EPA) has reviewed the above-referenced document. As described in the Final Environmental Impact Statement (FEIS), this project proposes to construct a light rail connector in downtown Los Angeles that will directly link the tracks of the Metro Gold Line light rail system with the Metro Blue Line and future Metro Expo Line. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

EPA reviewed the Draft Environmental Impact Statement and provided comments to the Federal Transit Administration (FTA) in our letter of October 8, 2010. We rated the project Lack of Objections (LO), but had minor concerns about construction emissions, localized air quality impacts due to increased congestion, and integration of smart growth and sustainability principles. We appreciate the changes made to the document and additional mitigation measures which have been committed to in the FEIS and Mitigation Monitoring and Reporting Program to address our concerns, as well as the additional analysis of impacts to potential sensitive receptors in the project area. Furthermore, we commend FTA for the expanded discussion in the FEIS of smart growth and opportunities to encourage multimodal transportation in the project area. Based on FTA's response to EPA's comments, we have no further concerns with the proposed project.

We appreciate the opportunity to review this FEIS. If you have any questions, please contact Clifton Meek, the lead reviewer for this project, at 415-972-3370 or meek.clifton@epa.gov.

Sincerely,

Connell Dunning, Transportation Team Supervisor

**Environmental Review Office** 

Cornell Curry

Communities and Ecosystems Division

cc: Dolores Roybal-Saltarelli, Los Angeles County Metropolitan Transportation Authority Ray Sukys, Federal Transit Administration

## FIRE

#### **COUNTY OF LOS ANGELES**

#### FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE LOS ANGELES, CALIFORNIA 90063-3294 (323) 881-2401

DARYL L. OSBY FIRE CHIEF FORESTER & FIRE WARDEN

February 22, 2012

Ms. Dolores Roybal Saltarelli, Project Manager Metropolitan Transportation Authority One Gateway Plaza, MS 99-22-2 Los Angeles, CA 90012

Dear Ms. Saltarelli:

FINAL ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR THE REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT, LOS ANGELES (FFER #201200020)

The Final Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

#### PLANNING DIVISION:

1. The subject property is entirely within the City of Los Angeles, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department.

#### LAND DEVELOPMENT UNIT:

1. This project is located entirely in the City of Los Angeles. Therefore, the City of Los Angeles Fire Department has jurisdiction concerning this project and will be setting conditions. This project is located in close proximity to the jurisdictional area of the Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates comments concerning general requirements from the Los Angeles County Fire Department, Land Development Unit.

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

Ms. Dolores Roybal Saltarelli February 22, 2012 Page 2

#### FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

- 1. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance.
- 2. The areas germane to the statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division have been addressed.

#### **HEALTH HAZARDOUS MATERIALS DIVISION:**

1. The Health Hazardous Materials Division has no objection to the proposed project.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

JOHN R. TODD, CHIEF, FORESTRY DIVISION

PREVENTION SERVICES BUREAU

JRT:ij

From:

Kerman, Ann

Sent:

Tuesday, February 21, 2012 5:15 PM

To:

Roybal, Dolores; Carlson, Eric; 'Jackson, Virginia'; Kornblatt, Helene B.

Cc:

'Ginny Brideau'; 'Clarissa Filgioun'

Subject:

FW: Comments on FEIR of the Regional Connector

FYI

From: Kang Hu [mailto:kang.hu@lacity.org] Sent: Tuesday, February 21, 2012 4:47 PM

To: Kerman, Ann

Cc: Calvin Chow; Jesus Serrano

Subject: Comments on FEIR of the Regional Connector

Dear Ms. Kerman,

The Los Angeles Department of Transportation (LADOT) values its continuing partnership with the Metro in development of the Regional Connector Project. Our Department has completed a review of the Final EIR (FEIR) document. In general, most of the comments generated by our Department in the review of the Draft EIR were addressed. However, we have the following comments:

Please be advised that the Locally Preferred Alternative (LPA) mitigation measures to meet existing traffic demands during construction will need to be approved by the Major Transit and Transportation Construction Traffic Management Committee (MTTCTMC).

The City of Los Angeles Bicycle Plan, which was approved and adopted on March 1, 2011, specifies bike lanes on Flower Street between 4<sup>th</sup> & 7<sup>th</sup> Streets. Our Department requests that Metro make provisions for the bicycle lanes in the final design per the most current LADOT design standards.

Lastly, we would like to address parking issue. A permanent displacement of approximately 270 off-street parking spaces would occur as a result of the acquisitions required for the LPA. Approximately 130 of these off-street parking spaces are in the Little Tokyo community. While Metro has stated that mitigation measures have been developed and included in the Mitigation Monitoring and Reporting Program, the measures only apply during construction. Permanent loss of parking generates great concern from businesses and local communities. We would encourage Metro to consider mitigation measures for the permanent loss of parking in the Downtown area.

Kang Hu, P.E.
Division Manager, Sr. Transportation Engineer
Transit Corridors and Bikeways Division
City of Los Angeles Department of Transportation

100 S. Main Street, 9th Floor Los Angeles, CA 90012 (o) 213-972-8627 kang.hu@lacity.org



February 21, 2012

LA County Metro Board of Directors One Gateway Plaza Los Angeles, CA 90012-2952

#### RE: Regional Connector Construction

Dear Metro Board of Directors:

On behalf of the Los Angeles Area Chamber of Commerce, I write to request that you delay Board action on Thursday to give Metro staff the time to work with the businesses located in the financial section of Flower Street between fourth and sixth streets on an acceptable construction plan for the building of the Regional Connector Transit Corridor.

The Chamber has long been a supporter of the Regional Connector project which will better tie together our mass transit lines into a seamless system. However, the construction plan, as laid out in the Final Environmental Impact Statement/Final Impact Report (FEIS/FEIR) for your certification at the February 23, 2012 Board meeting, has the potential to severely impact vehicular and pedestrian access for these downtown businesses that are just now beginning to show signs of recovery. A certain amount of disruption for a project of this size is expected, but the businesses along this corridor feel that they are very likely to experience disruptions that will damage their livelihood for many years. For these businesses that were originally hopeful that a new station would be added at Fifth Street for the convenience of their employees and customers, the potential loss of business from construction feels like double jeopardy.

Specifically, we ask you to address several outstanding questions with regard to the construction process. These questions include the difference in cost and length of time between a "cut and cover" process vs. use of the tunnel boring machine (TBM) method, whether or not the tiebacks hamper the feasibility of TBM, and why TBM is used for virtually all other portions of the line.

With support for the project included in the President's FY2013 budget last week, we look forward to the Regional Connector Transit Corridor moving forward as quickly as possible. The business community supports this project, but we want to ensure sure that it's achieved with minimal impact to the businesses that have contributed so much to making downtown a destination that is appropriately served by mass transit. If you have any questions, please feel free to contact me or Jessica Duboff at 213.580.7558, jduboff a lachamber.com

Sincerely,

Gary Toebben
President & CEO

CC: Art Leahy, Chief Executive Officer, Metro

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# MEMORANDUM OF AGREEMENT BETWEEN THE FEDERAL TRANSIT ADMINISTRATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT.

### REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT, LOS ANGELES COUNTY, CALIFORNIA

WHEREAS, the Los Angeles County Metropolitan Transportation Authority (LACMTA or Metro) propose to construct the Regional Connector Transit Corridor Project within the city of Los Angeles, California and is seeking financial assistance from the U.S. Department of Transportation Federal Transit Administration (FTA) for the Regional Connector Project, which is therefore a Federal undertaking subject to Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470f) and its implementing regulation at 36 CFS 800; and

WHEREAS, the Regional Connector Transit Corridor Project (Undertaking) consists of adding 1.9 miles of new dual tracks (2.9 miles of track for all alternatives combined) in downtown Los Angeles that would provide a direct link between the Metro Gold, Blue, and Expo Lines by bridging the gap in the regional light rail network between 7<sup>th</sup> Street/Metro Center Station at 7<sup>th</sup> and Flower Streets and the Little Tokyo/Arts District station at 1<sup>st</sup> and Alameda Streets. This would allow for direct trains from East Los Angeles to Culver City and from Long Beach to Pasadena. The project also includes construction of three new stations downtown that would allow passengers on the Metro Gold, Blue, and Expo Lines to reach multiple destinations in the central business district without transferring.

WHEREAS, five (5) alternatives were analyzed in the Draft Environmental Impact Statement/Report (DEIS/DEIR), in September 2010, and, LACMTA selected the Fully Underground LRT as the locally preferred alternative in October 2010; and

WHEREAS, FTA has consulted with the California State Historic Preservation Officer (SHPO) and, in accordance with 36 CFR Part 800, the regulation implementing Section 106 of the NHPA of 1966 (16 U.S.C. 470f), as amended, regarding the Undertaking's potential to affect historic properties, has decided to prepare a Memorandum of Agreement (MOA) pursuant to 36 CFR § 800.4(b)(2) and 800.14(b), and has notified the Advisory Council on Historic Preservation (ACHP) that a MOA will be prepared, pursuant to 36 CFR § 800.6(a)(1)(i)(C); and

WHEREAS, on April 7, 2009, the FTA and LACMTA initiated consultation efforts with the SHPO regarding the proposed Undertaking, the proposed Area of Potential Effects (APE), and consultation coordination; and

WHEREAS, on December 23, 2009, LACMTA continued consultation with personnel from the Office of Historic Preservation (OHP) to further discuss the proposed undertaking, proposed APE, methods for identification of historic properties, and documentation standards; and

WHEREAS, FTA has determined that the Undertaking has the potential to adversely affect the Zanja Madre (Mother Ditch aqueduct from the Los Angeles River), CA-LAN-887H,

numerous unrecorded numbered zanjas, and sites CA-LAN-3588, P-19-003338, and P-19-003339; and

WHEREAS, FTA has determined that the Undertaking has the potential to affect historic properties (namely, Barker Brothers, Roosevelt Building, General Petroleum, Superior Oil Company Building, The California Club, Los Angeles Library, Former Nishi Hongwanji Buddhist Temple, Los Angeles Times Building, Mirror Building, Cathedral of Saint Vibiana, Cathedral of Saint Vibiana (Rectory), 2<sup>nd</sup> Street Tunnel, and Disney Hall), but would not adversely affect these properties provided the measures in this MOA are implemented; and

WHEREAS, on June 1, 2010, OHP concurred with the determinations of eligibility and finding of effects by FTA and

WHEREAS, based on continued consultation with the OHP, FTA has chosen to prepare this MOA to minimize the potential for adverse effects and resolve any adverse effects on historic properties within the Undertaking's APE subsequent to its approval of the Undertaking; and

WHEREAS, no Federally recognized Indian tribes (as defined in 36 CFR 800.16(m) expressed an interest in consulting on the Undertaking, however, LACMTA, on behalf of the FTA, consulted with the Native American Heritage Commission and the local Native American community regarding the cultural sensitivity of the project area; and

WHEREAS, LACMTA, on behalf of the FTA, consulted with 18 local government offices, historical organizations, and individuals interested in historic preservation in Los Angeles County about the Undertaking and its effects on historic properties; and

WHEREAS, at such time as any unevaluated cultural resources may be discovered during the project, it may require archaeological evaluation, data recovery, consultation with Indian tribes, and/or other historic preservation activities, in compliance with Section 106 and concurrent with active construction; and

WHEREAS, the FTA and the LACMTA shall make the terms and conditions of this MOA part of the conditions of any permissions and grants issued by the FTA for this project; and

WHEREAS, the FTA and SHPO are signatories pursuant to 36 CFR 800.6(c)(1) and have the authority to execute, amend, or terminate this Agreement; and

WHEREAS, the LACMTA is an invited signatory pursuant to 36 CFR 800.6(c)(2) and has the authority to execute, amend, or terminate this Agreement; and

**NOW, THEREFORE,** all signatories agree that, upon FTA's decision to proceed with the Undertaking, FTA shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties; and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

#### **STIPULATIONS**

FTA will ensure that the terms of this MOA are carried out and will require, as a condition of any approval of Federal funding for the undertaking, adherence to the stipulations set forth herein.

#### I. ARCHAEOLOGICAL RESOURCES

#### A. Cultural Resources Monitoring and Mitigation Plan

A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be developed by LACMTA. The CRMMP shall describe the specific field methodologies to be utilized, including procedures to be followed for the archaeological monitoring of construction activities and if prehistoric and historic period archaeological resources are encountered. The mitigation and monitoring shall meet the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716-44740), take into account the Council's publication, Treatment of Archaeological Properties: A Handbook (Advisory Council on Historic Preservation 1980) as well as standards and guidelines established by the SHPO.

Upon completion in draft form, LACMTA will submit the Draft CRMMP to all other signatories to this MOA for a 15 working day review period. LACMTA will incorporate any comments received during this review period into the final CRMMP. If any party fails to submit their comments within fifteen working days, all parties shall assume that party's concurrence with the Draft CRMMP. The CRMMP shall be completed prior to the commencement of construction.

#### B. Identifying Archaeological Resources

LACMTA shall ensure that cultural resources discovered within the Archaeological APE are identified and evaluated pursuant to the CRMMP.

#### C. Evaluating Archaeological Resources

Evaluations performed hereunder shall conform to the procedural requirements of 36 CFR § 800.4(c) (1-2). Failure of any party consulted pursuant to 36 CFR § 800.4(c)(1-2) to respond within 21 days after receipt of a LACMTA request for comments on determinations of NRHP eligibility may be considered by LACMTA to constitute concurrence with FTA's determination. The signatories agree that only cultural resources determined eligible for inclusion in the NRHP will be subject to further consideration under the terms of this MOA.

#### D. Determining and Treating Effects

- 1. LACMTA will make every reasonable effort to ensure that potential effects of any undertaking activity on identified historic properties are avoided. When avoidance is required, LACMTA may proceed with the undertaking activity in accordance with any conditions or restrictions that may be needed to ensure avoidance. However, the FTA shall not authorize construction to proceed hereunder unless and until any objections raised pursuant to the terms of this MOA have been resolved.
- 2. Four archaeological sites that are either within or immediately adjacent to the APE have been presumed eligible for listing on both the NRHP and the CRHR. These include the Los Angeles zanja system (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339). Due to the lack of exposed soil

surface and context, the treatment of these sites (if they survive) may include systematic and scientific exposure, evaluation, and if necessary, treatment. LACMTA shall ensure that treatment measures include documentation consisting of historical research, archaeological testing and recording, Historic American Engineering Record (HAER) documentation that includes a narrative report, measured drawings, and photographs that are consistent with HAER standards, distribution of architectural and archaeological reports to public repositories, and public interpretation. The CRMMP will specify the qualifications for individuals conducting the treatment activities, required levels for the HAER documentation, required milestones for completion, timeline for construction resumption, and a process for review of the deliverables.

3. If the FTA and LACMTA, in consultation with SHPO, determines that effects of any undertaking activity on historic properties cannot be avoided, and that such effects will be adverse, then the adverse effects will be resolved by LACMTA through the implementation and completion of the data recovery program prescribed by and set forth in the CRMMP or in any successor CRMMP that is developed following execution of this MOA. The FTA will permit LACMTA to proceed with the Undertaking activity after the adverse effect of the undertaking activity on the historic property has been resolved to the satisfaction of the FTA and SHPO by completion of the fieldwork phase of CRMMP implementation. However, the FTA shall not authorize construction to proceed hereunder unless and until any objections raised pursuant to the terms of this MOA have been resolved.

#### E. Amending the CRMMP

- 1. Within 30 days following execution of this MOA, the signatories shall consult to review and amend the CRMMP to their mutual satisfaction. The amended CRMMP shall be implemented by LACMTA as required by the terms of this MOA.
- 2. Any signatory may, in writing, propose to the other signatories that the CRMMP be further amended. Thereupon, the signatories will proceed to address the amendment proposal.
- 3. Amendment of the CRMMP, as stipulated hereunder, will not require amendment of this MOA.

#### F. Reporting Requirements

- 1. LACMTA will submit to the signatories a written report on a semi-annual basis based upon the date of the issuance of the Record of Decision for the project, documenting the activities carried out pursuant to this stipulation. These reports will be submitted until the fieldwork phases of this stipulation have been completed. A schedule of fieldwork and the expected dates for reports will be provided to the required signatories to this MOA.
- 2. Within three months after LACMTA has determined that all fieldwork required by this stipulation have been completed, LACMTA will submit to the signatories and to Native American consulting parties a written summary report that comprehensively presents the results of all inventory, evaluation, and treatment actions carried out pursuant to this stipulation.
- 3. Within six months after LACMTA has determined that all fieldwork required by this stipulation have been completed, LACMTA will ensure preparation, and concurrent distribution

to the other signatories and to Native American consulting parties for review and comment, of a written draft technical report that documents the results of implementing the CRMMP. The reviewing parties will be afforded 30 days following receipt of the draft technical report to submit any written comments to LACMTA. Failure of these parties to respond within this time frame shall not preclude LACMTA from authorizing revisions to the draft technical report as FTA may deem appropriate. LACMTA will provide the reviewing parties with written documentation indicating whether and how the draft technical report will be modified in accordance with any reviewing party comments. Unless the reviewing parties object to this documentation in writing to LACMTA within 30 days following receipt, LACMTA may modify the draft technical report as LACMTA may deem appropriate. Thereafter, LACMTA may issue the technical report in final form and distribute this document as appropriate.

4. Copies of the final technical report documenting the results of CRMMP implementation will be distributed by LACMTA to the other signatories, to Native American consulting parties, and to the appropriate California Historic Resources Information Survey (CHRIS) Regional Information Center, as appropriate.

### G. Consultation with Native American Individuals, Tribes and Organizations and Treatment of Cultural Remains and Artifacts.

- 1. LACMTA has consulted with several Native American tribes, individuals, and organizations that do not meet the definition of Indian tribe pursuant to 36 CFR 800.16(m). These Native American individuals and organizations include the Ti'At Society, Gabrielino Tongva Indians of California Tribal Council, Gabrielino Tongva Nation, Gabrielino/Tongva San Gabriel Band of Mission Indians, and Tongva Ancestral Territorial Tribal Nation.
- 2. LACMTA will ensure that Native American tribes, individuals and organizations are consulted during, and will be invited to participate in, the implementation of the terms of this MOA and in implementation of the Undertaking. The consultation with Native Americans herein prescribed shall be implemented by LACMTA in accordance with applicable sections of the MOA and any successor MOA.
- 3. The parties to this MOA agree that Indian burials and related items discovered during the implementation of the MOA and the Undertaking will be treated in accordance with the requirements of § 7050.5(b) of the California Health and Safety Code. If, pursuant to § 7050.5(c) of the California Health and Safety Code, the county coroner/medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §§ 5097.98 (a) (d) of the California Public Resources Code.
- 4. LACMTA will ensure that the expressed wishes of Native American individuals, tribes, and organizations are taken into consideration when decisions are made regarding the disposition of other Native American archaeological materials and records relating to Indian tribes.

#### H. Confidentiality

The signatories to this MOA acknowledge that historic properties covered by this MOA are subject to the provisions of § 304 of the National Historic Preservation Act of 1996 and §

6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archeological site information and having so acknowledged, will ensure that all actions and documentation prescribed by this MOA are consistent with §304 of the National Historic Preservation Act.

#### I. Worker Training

Prior to initiating ground-disturbing activities, a qualified archaeologist will conduct a short cultural resources awareness training session for all construction workers and supervisory personnel. Each worker will learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities.

J. Unanticipated Discoveries

If FTA and LACMTA determines, after any future construction of the Undertaking has commenced, that project activities will affect a previously unidentified archeological or historical resources that may be eligible for the National Register, or affect a known resource in an unanticipated manner, FTA and LACMTA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The LACMTA must notify the FTA and SHPO within 48 hours of the discovery. The LACMTA will halt all construction work involving subsurface disturbance in the area of the discovery and in the surrounding area where additional resources can reasonably be expected to occur. Construction work may continue in the area outside the discovery as defined by the LACMTA in consultation with the FTA and SHPO. FTA, at its discretion may hereunder, and pursuant to 36 CFR § 800.13(c), assume any unanticipated discovered property to be eligible for inclusion in the National Register.

For properties determined eligible or assumed to be eligible pursuant to Stipulation I.J., LACMTA will notify the FTA, ACHP, and SHPO of those actions that it proposes to avoid, minimize, or mitigate adverse effects which may include treatment as outlined in the CRMMP. Consulting parties will have forty-eight (48) hours to provide their views on the proposed actions. The FTA will ensure that the timely filed recommendations of consulting parties are taken into account prior to granting approval of the measures that the LACMTA will implement to resolve adverse effects. The LACMTA will carry out the approved measures prior to resuming construction activities in the location of the discovery.

#### II. ARCHITECTURAL HISTORY PROPERTIES

#### A. Pre-Construction Baseline Survey

LACMTA will prepare a pre-construction survey of all historic properties within 21 feet of vibration producing construction activity to assess the building category and the potential for Ground Borne Vibration to cause damage. The survey would also be used to establish baseline, pre-construction condition for historic properties for the purposes of construction monitoring. The survey would be conducted for the following historic properties: Barker Brothers, Roosevelt Building, General Petroleum, Superior Oil Company Building, The California Club, Los Angeles Library, Walt Disney Concert Hall, Former Nishi Hongwanji Buddhist Temple, Los Angeles Times Building, Mirror Building, Cathedral of Saint Vibiana, Cathedral of Saint Vibiana (Rectory), and the 2<sup>nd</sup> Street Tunnel.

#### **B.** Geotechnical Investigations

For the historic properties noted in Stipulation II.A, geotechnical investigations will be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the alignment. This analysis will assist in the development of appropriate support mechanisms and measures for cut and fill construction areas. The subsurface investigation would also identify areas that could cause differential settlement as a result of using a TBM in close proximity to historic properties. An architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards will provide input and review of final design documents prior to implementation of the mechanisms and measures. The review will evaluate whether the geotechnical investigations and support measures for cut and fill, and measures to prevent differential settlement meet the Secretary of the Interior's *Standards for the Treatment of Historic Properties*. The evaluation of measures will be forwarded by the LACMTA to the FTA and SHPO for review. The FTA, in consultation with LACMTA and SHPO, shall approve the evaluation and permit the LACMTA to proceed with construction.

### C. Building Protection Measures, Geotechnical and Vibration Monitoring, and Post-Construction Survey

For those historic properties noted in Stipulation II.A., LACMTA will develop building protection measures, conduct geotechnical and vibration monitoring, and complete a post-construction survey. For these properties, LACMTA shall use building protection measures such as underpinning, soil grouting, or other forms of ground improvement, as well as lower vibration equipment and/or construction techniques. LACMTA shall also ensure that TBM Specifications include specific provisions regarding the use of earth pressure balance or slurry shield TBM.

LACMTA shall also develop and conduct a geotechnical and vibration monitoring program. The monitoring program shall include field evaluation of building conditions during construction, monitoring of ground vibration measurement equipment. The monitoring program shall be conducted by an architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61).

A post-construction survey shall also be undertaken by LACMTA. This survey would evaluate whether any damage to historic properties occurred during construction. If the survey identifies any adverse effects to historic properties noted in Stipulation II.A, consultation with the SHPO shall be re-initiated by the FTA with a brief report supplied by LACMTA noting the extent of the adverse effect and the proposed repairs. All repairs to historic properties shall be consistent with the Secretary of the Interior's Standards for Rehabilitation. SHPO shall have 30 days to review the report and the proposed measures to resolve adverse effects. If no response is received from the SHPO, the FTA and LACMTA may assume concurrence. If comments from the SHPO are received, the FTA shall take into account the comments and authorize LACMTA to proceed with the repairs to the building.

### D. Building Protection Measures, Geotechnical and Vibration Monitoring, and Communication measures for the Walt Disney Concert Hall

LACMTA shall conduct evaluations during the final engineering phase to confirm initial estimates for noise and vibration. Thereafter, if necessary, LACTMA shall specify that the

contractor will employ high compliance resilient fasteners, floating slab trackbed or other appropriate measures, to reduce operational groundborne noise impact below FTA criteria, as described in the FTA guidance, *Transit Noise and Vibration Impact Assessment* (2006).

During construction LACMTA shall provide monitoring for groundborne noise at the Walt Disney Concert Hall and the Roy and Edna Disney/CalArts Theater (REDCAT). LACMTA shall also provide advance notification to the Walt Disney Concert Hall and the Roy and Edna Disney/CalArts Theater (REDCAT) regarding schedules for tunneling and other activities prior to the commencement of those activities. If the FTA and LACMTA determines, in consultation with the SHPO, that construction related noise causes an adverse effect to the historic property, then the CRRMP will be amended by LACMTA following the process for CRMMP amendment noted in Stipulation I.E. The amendment will include proposed measures to reduce noise or further coordinate construction so as to minimize effects.

#### III.REPORTING REVIEWS

- A. Upon completion of construction and any reports prepared under the CRMMP, the SHPO shall have thirty (30) days to review the draft and comment on the level of effort, results, and eligibility recommendations; those comments shall be incorporated into the final technical report, as appropriate. If no response by the SHPO is received by the LACMTA within 30 days, the LACMTA shall assume concurrence and authorize the final report and/or the historic architectural documentation.
- **B.** Within thirty (30) days of receipt of comments on any draft report, the FTA and LACMTA shall submit the final report and/or historic architectural documentation to the SHPO, the appropriate CHRIS information center, and the appropriate Indian tribe(s), and shall make it available to other interested persons who meet the confidentiality requirements. Reports prepared under the CRMMP shall not be distributed to the general public, except in an abridged form that does not include sensitive information about archaeological site locations or human remains.
- C. All reports generated as a result of this MOA shall be consistent with contemporary professional standards and the Secretary of the Interior's guidelines.

#### IV. ADMINISTRATIVE PROVISIONS

#### A. Standards

- 1. **Definitions.** The definitions set forth at 36 CFR § 800.16 are applicable throughout this MOA.
- 2. **Professional Qualifications.** All activities prescribed by Stipulations I and II of this MOA shall be carried out by LACMTA under the authority of FTA by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. Nothing in this stipulation, however, may be interpreted to preclude FTA and LACMTA or any agent or contractor thereof from using the properly supervised services of persons who do not meet the *PQS*.

- 3. **Documentation Standards.** Written documentation of activities prescribed by Stipulations III, IV, V, VI, and VII of this MOA shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.
- 4. Curation and Curation Standards. LACMTA shall ensure that, to the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this MOA are curated in accordance with 36 CFR Part 79. FTA will ensure that, to the extent permitted by applicable law and regulation, the views of the Most Likely Descendant(s) are taken into consideration when decisions are made about the disposition of other tribal archaeological materials and records.

#### B. Dispute Resolution

- 1. Should any signatory party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the FTA will consult with such party to resolve the objection. If the FTA determines that such objection cannot be resolved, the FTA will forward all documentation relevant to the dispute, including the applicable federal agency's proposed resolution, to the ACHP. The ACHP will provide the appropriate federal agency with its advice on the resolution of the objection within thirty (30) calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the FTA will prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP or signatory parties, and provide them with a copy of this written response. The FTA will then proceed according to its final decision.
- 2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) calendar day time period, the applicable federal agency may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the appropriate federal agency will prepare a written response that takes into account any timely comments regarding the dispute from the signatories to the MOA, and provide them and the ACHP with a copy of such written response.
- 3. The appropriate federal agency's responsibility is to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute.

#### C. Amendments

1. Any MOA party may propose that this MOA be amended, whereupon the MOA parties will consult for no more than 30 days to consider such amendment. FTA may extend this consultation period. The amendment process shall comply with 36 CFR §§ 800.6(c) (1) and 800.6(c) (7). This MOA may be amended only upon the written agreement of the signatory parties. If it is not amended, this MOA may be terminated by any of the signatory parties in accordance with Section D of Stipulation IV.

#### D. Termination

1. If this MOA is not amended as provided for in section D of this stipulation, above, or if either signatory party proposes termination of this MOA for other reasons, the signatory party

proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other MOA parties for at least 30 days to seek alternatives to termination.

- 2. Should such consultation result in an agreement on an alternative to termination, then the parties shall proceed in accordance with the terms of that agreement.
- 3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
- 4. If this MOA is terminated hereunder, and if FTA determines that the Undertaking will nonetheless proceed, then FTA shall either consult in accordance with 36 CFR §800.6 to develop a new MOA, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

#### E. Duration of the MOA

- 1. Unless terminated pursuant to Section D of Stipulation IV above, or unless superseded by an amended MOA, this MOA will be in effect following execution by the signatory parties until FTA, in consultation with the other MOA parties, determines that all of its stipulations have been satisfactorily fulfilled. This MOA will terminate and have no further force or effect on the day that FTA notifies the other MOA parties in writing of its determination that all stipulations of this MOA have been satisfactorily fulfilled.
- 2. The terms of this MOA shall be satisfactorily fulfilled within ten (10) years following the date of execution by the signatory parties. If FTA determines that this requirement cannot be met, the MOA parties will consult to reconsider its terms. Reconsideration may include the continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, FTA will comply with section E.4 of Stipulation VIII, above, if it determines that the Undertaking will proceed notwithstanding termination of this MOA.
- 3. If the Undertaking has not been implemented within ten (10) years following execution of this MOA by the signatory parties, this MOA shall automatically terminate and have no further force or effect. In such event, FTA shall notify the other MOA parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.
- **F.** Effective date. This MOA will take effect on the date that it has been fully executed by FTA, LACMTA, and SHPO.
- **G. Execution** of this MOA by FTA, LACMTA, and SHPO, its transmittal by FTA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this MOA is an agreement for purposes of section 110(1) of the NHPA, and shall further evidence that FTA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

Federal Transit Administration			
Ву	Leslie T. Rogers Regional Administrator FTA Region IX	Date	9/15/11
California State Office of Historic Preservation  By Date 305EP 2011			
	M. Wayne Donaldson, FAIA State Historic Preservation Officer California Department of Parks and Recreation		
INVITED SIGNATORY PARTY:			
Los Angeles County Metropolitan Transportation Authority			
Ву	Arthur T. Leahy  Chief Executive Officer	Date	9-13-11

Los Angeles County Metropolitan Transportation Authority